

Undergraduate Moral Development and Academic Dishonesty

by

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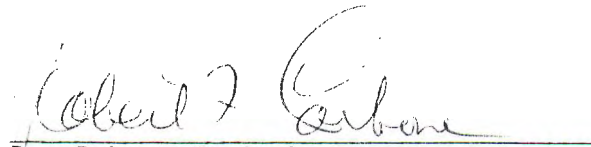
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ABSTRACT

Title of Dissertation: Undergraduate Moral Development and Academic Dishonesty

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The study was designed to respond to the continuing concern for ethical conduct and to increase our understandings of the moral development of college students and of the extent and scope of academic dishonesty on campus.

Kohlberg and other cognitive-developmental theorists base their theories on several assumptions. They are: (a) that structural organizations exist; (b) that these organizations are hierarchical and sequential, and (c) that development is motivated by an individual's interaction with the environment. Moral developmental research describes six stages of development that represent the logical organization or structure of thought, which underlies the manifestation of moral judgments. As people mature and develop, they progress through the stages and view moral dilemmas differently.

It was hypothesized that there is a positive relationship between college students' stage of moral development and the degree of seriousness with which they view academic dishonesty; that there is an inverse relationship between college students' stage of moral development and their participation in forms of academic dishonesty; and that there is an inverse relationship between the degree of seriousness with which college students view academic dishonesty and their participation in forms of dishonesty. Several ancillary issues were also explored, but no hypotheses were formulated for these issues.

Two instruments were used to collect data for this study. The Defining Issues Test, designed and tested by James Rest at the University of

Minnesota, was used to assess moral development. The second instrument, the Survey of Academic Dishonesty, was developed specifically for use in this study. Three groups of items in the Survey were used to calculate subscores to assess the attitudes about the seriousness of forms of academic dishonesty, the amount of personal participation in academic dishonesty, and the amount of observed participation by other students in dishonesty. Both instruments were administered to a sample of 146 undergraduate students at the University of Maryland.

Pearson Correlation Coefficients were computed to determine the relationship between moral development, using the P-score, and the "serious score" as a measure of the degree of seriousness with which students view academic dishonesty and the "personal participation score" used as a measure of participation. A Pearson Correlation Coefficient was also computed to determine the relationship between attitude and personal participation. Descriptive statistics and chi-square analyses were used to analyze student characteristics and responses to individual items.

Two of the three hypotheses were statistically significant beyond the .05 level. There was a slight relationship between college students' stage of moral development and the degree of seriousness with which they view academic dishonesty and there was an inverse relationship between the degree of seriousness with which students view dishonesty and their participation in forms of academic dishonesty. The results failed to demonstrate a relationship between stage of moral development and personal participation.

Other findings included: the modal stage of moral development was stage 4, conventional thinking; older students and students living off campus were more mature in their moral reasoning than were younger students or students living on campus; cheating associated with examinations was

considered to be more serious than cheating on homework or term papers; active forms of cheating was considered to be more serious than the more passive forms; the majority of students would not report incidents of cheating to the appropriate authorities; the majority of students cheat to avoid failure; and older students consider academic dishonesty to be more serious and reported less personal and observed participation in academic dishonesty than did younger students.

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Chapter One

The Problem

Ethics in higher education has been of continuing interest for a variety of individuals and groups. The Carnegie Council on Policy Studies in Higher Education has discussed "moral values", equality of opportunity, educational justice and student conduct. The report, Fair Practices in Higher Education (1979), is particularly concerned with the ethical condition of higher education in a period of intensified competition for enrollments.

The Carnegie Council (1979) identified what it considers to be "certain signs of deterioration of important parts of academic life" (p. 3). These signs include: a significant and apparently increasing amount of cheating by students in academic assignments; a substantial misuse by students of public financial aid; theft and destruction by students of valuable property, most specifically library books and journals; inflation of grades by faculty members; competitive awarding of academic credits by some departments and institutions for insufficient and inadequate academic work; and inflated and misleading advertising by some institutions in the search for students.

Addressing an alumni conference at New York University in 1978, Professor Amitai Etzioni indicated that the "hottest" new item in the "post Watergate" curriculum is moral education. He cited examples of the ethical breakdown, such as the cheating scandals at the service academies, the term paper production business, and the increasing number of young Americans who admit to cheating on exams.

As higher education enters the decade of the 80's, it will be faced with declining enrollments, severe competition for students and funds, and

continued pressure to improve the quality and rigor of its offerings. The general economic and political climate will make it increasingly difficult for higher education to continue to achieve its traditional goals.

Within this climate higher education will be forced to confront what Hall and Davis (1975) describe as a moral crisis. A moral crisis is a societal state in which many people have, for one reason or another, lost their sense of what is right. People either don't know what values or principles they hold or they are uncertain how to apply them. In most cases a moral crisis is a product of the changed conditions of life and the social, economic, and political pressures of the times. The guidelines and principles which guided the behavior of earlier generations are no longer adequate for the world as it is known today. The current political and economic condition of our society may be contributing to a "moral crisis" within higher education.

Levine (1980) points out that today's college students reflect a growing pessimism about the nation and its institutions. Changes in the society, in the family, and in the schools, and in the media have resulted in a sense on the part of college students that things are falling apart. Today's college students have grown up in an age which Levine characterizes as a period of "individual ascendancy". Individual ascendancy is differentiated from "community ascendancy" by an emphasis on duty to self rather than to others, a concern for rights more than responsibilities; an acceptance of the propriety of taking rather than giving; a present orientation rather than a future orientation; a focus on the differences rather than the commonalities among people; and a hedonistic rather than ascetic attitude (Levine, 1980, p. 25).

Recognizing that the strength of our society depends on free citizens who must be able to make difficult moral choices, higher education must

become more deliberate in its efforts to prepare students for these tasks (McBee, 1978). Tolerance of academic dishonesty represents failure on the part of higher education to achieve its fundamental purpose. The existence of wide-spread plagiarism, cheating, and other forms of academic dishonesty is contrary to the underlying values of higher education and can destroy the integrity of the academic community.

Within this context, the remainder of this chapter describes the purpose of the study, outlines the problem, defines critical terms, lists the research hypotheses and the ancillary issues, and discusses the theoretical framework.

Purpose of the Study

If the Carnegie Council's assessment of the deterioration of important parts of academic life is accurate, college and university administrators and faculty must focus their attention on these problems and seek to develop appropriate strategies and solutions to protect and enhance the integrity of the academic experience.

American higher education has been organized to prepare students for professional and occupational advancement by increasing their knowledge and skills. In addition, colleges and universities have embraced the concept of educating the "whole person" and have been concerned with facilitating the students' personal, social, and emotional growth (Williamson, 1961). In order for colleges and universities to be successful in accomplishing these goals, continued attention must be given to the protection and enhancement of academic integrity.

The study reported here was designed to respond to the concern for ethical conduct among college students through increasing understandings about the moral development of college students and considering the extent and scope of academic dishonesty.

Statement of the Problem

The major questions addressed in this research were: (1) What is the relationship between college students' stage of moral development and their participation in forms of academic dishonesty? (2) What is the relationship between college students' stage of moral development and their attitude toward the seriousness of forms of academic dishonesty? (3) What is the relationship between college students' participation in academically dishonest behaviors and their attitude toward the seriousness of forms of academic dishonesty?

Definition of Terms

One of the problems associated with developmental studies is the absence of a precise nomenclature or terminology (Wertheimer, 1980). Terms are often used which have different meanings in different studies. For the purposes of this study the following terms are defined accordingly.

1. Cognitive developmental theory -- Theories based on the following assumptions: (a) that structural organizations exist, (b) that these organizations are hierarchical and sequential, and (c) that development is motivated by an individual's interaction with the environment. These theories tend to focus on the intellectual process used by the individual rather than the content of the individual's thought.

2. Stage of development -- The logical organization or structure of thought which underlies the manifestation of moral judgments and results from the interaction of the individual and the environment.

3. Developmental sequence -- The progression through stages is an invariant sequence, each stage being increasingly more differentiated than the previous stage, while incorporating the previous stage into it.

4. "Plus-one staging" -- individuals exposed to reasoning at stages

other than their own prefer statements at stages one stage above their own.

5. Decalage -- Vertical decalage refers to the tendency for an individual to operate at higher levels of complexity in response to experiences in the environment. Horizontal decalage refers to the tendency for an individual to use higher level operations attained in one area in other areas as well. This expansion results in the use of more complex cognitive processes.

6. Academic dishonesty refers to the forms of cheating and plagiarism which result in a student giving or receiving unauthorized assistance in an academic exercise or receiving academic credit for work which is not his/her own. The following forms of academic dishonesty are included in this study: "padding" a few items on a bibliography; copying a few sentences without footnoting in a paper; copying answers from a source without doing the work independently; writing a paper for another student; paying someone to write a paper to submit as your own work; getting questions or answers from someone who has already taken the exam; arranging with other students to give or receive answers by use of signals; copying from someone's exam paper without his knowledge; arranging to sit next to someone who will let you copy from his/her exam; allowing another student to copy from you during an exam; buying or selling an examination before it was administered; taking an exam for another student; having another student take an exam for you; working on homework with other students when the instructor doesn't allow it; and altering or forging an official college or university document.

7. Attitude toward academic dishonesty refers to the degree to which students consider certain forms of academic dishonesty as serious, ranging on a scale from not serious at all to extremely serious.

8. Participation in academic dishonesty refers to the frequency with which students take part in the forms of academic dishonesty.

9. "Reporting behavior" refers to what students would do when incidents of academic dishonesty are observed.

10. "Reasons why" refers to the explanation students give when academic dishonesty occurs.

Theoretical Framework

It is generally accepted that higher education has a responsibility to prepare students to deal with moral choices and conflict. Therefore academicians are faced with the task of deciding how best to accomplish this goal.

Several approaches to moral education are described in the literature (Hall and Davis, 1975; Hersh, Paolitto, and Reimer, 1979; Kohlberg and Turiel, 1971). These approaches are generally classified as follows: values inculcation or indoctrination, values clarification, and cognitive moral development. Values inculcation or indoctrination involves teaching students that a particular set of values, defined by society as "good", are to be used as a guide for future action. Because indoctrination diminishes the freedom of human thought and action its use in a society which cherishes those freedoms is seriously limited.

Values clarification assumes that in the consideration of values there are no single, right answers, and that it is important for students to have clear views about their values. The approach relies heavily on self-observation and analysis. The fact that the rational decision maker recognizes that values are relative is emphasized; we don't all make the same decision in a situation because we each have our own values.

The cognitive moral developmental approach focuses not on the content of an individual's beliefs but rather on the reasoning process a person uses in solving a moral dilemma. As people mature and develop they

view moral dilemmas differently. Cognitive-developmentalists contend that the basic mental structure, or stage of development underlying a person's reasoning is a product of the interaction between the individual and the environment. Progression through the stages is in an invariant and hierarchical sequence (Boyce and Jensen, 1978; Rest, 1975; Turjel, 1973). A more thorough and detailed review of the cognitive developmental approach will be discussed later in this chapter.

Choice of Theoretical Framework

In their attempt to identify an integrated approach to moral education, Hall and Davis stated that

"Moral education needs a psychological foundation which is both firm in its research base and explicit enough to be of practical use. The Kohlberg model may have its problems, but it is, in our view, substantially sound as a general theory and sufficiently explicit to be of use to educators." (Hall and Davis, 1975, p. 49).

The cognitive-developmental approach to moral development was selected as the theoretical framework for this study primarily because of its applicability for use with college students and for the relationship between maturity in moral judgment and behavior (Haan, Smith, and Block, 1968; Krebs, 1967; Kohlberg, 1969, 1971; Smith, 1978). Research findings suggest that the way a person reasons about moral issues affects his actions, choices, and preferences. These findings have important implications for a study on academic dishonesty among college students.

The Cognitive Developmental Approach to Moral Development

Origins of the theory. The origins of the current research on moral development can be traced back to the late 1800's and the writings of John Dewey. Dewey described true education as supplying the conditions for development (Kohlberg, 1971). He believed that development was defined

by a psychology of invariant ordered sequential stages and by philosophic ethics and epistemology. According to Dewey, cognitive and moral development were the central aims of education. Moral development was more than conformity to or internalization of cultural norms; it resulted from the interaction of the individual with the environment. This early work was the foundation for later research by Piaget and Kohlberg.

Piaget. Jean Piaget's pioneering work with young children incorporated the earlier works of John Dewey and laid the foundation for the adolescent cognitive-developmental theory (Kohlberg, 1971). In Piaget's theory, development is a product of the human mind's tendency to systematize its processes into coherent systems and adapt those systems to changing environmental stimuli. Piaget refers to the methods of organizing information that have developed in a child's life as the child's "stage of development" (Duska and Whelan, 1975).

Piaget's theory describes stages of cognitive development from infancy through adolescence. Cognitive development is divided into four major periods: sensorimotor (birth to two years) characterized by the internalization of sensorimotor behaviors and the development of symbolic representation; preoperational (2-7 years) characterized by egocentric thinking expressed in animism, realism, and magic omnipotence; concrete operational (7-12 years) characterized by thought that is logical and reversible; and formal operations (12 and older) characterized by the ability to reason from a hypothesis to all its conclusions however theoretical (Pulaski, 1971, pp. 207-208). Piaget's conceptualization of moral development included two moralities which were preceded by an egocentric stage. The first morality, heteronomy, was a morality of constraint. It was followed by a morality of cooperation referred to as autonomy (Boyce and Jensen, 1978, p. 91).

Piaget's main assumption was that cognition and affect develop on parallel tracks and that moral judgment occurs as a naturally developing cognitive process.

Kohlberg. Building upon Piaget's basic cognitive-developmental framework, Lawrence Kohlberg postulated continuing stage development from childhood through early adulthood. Central to Kohlberg's theory are three basic constructs: Structural organization; developmental sequence; and interactionism (Kohlberg, 1971; Rest, 1973). These constructs are defined accordingly:

Structural organization - the active processing of information in a consistent manner by the individual. This is reflected in his/her stage response and/or behavior which represents an underlying thought organization.

Developmental sequence - the progression through stages in an invariant sequence, each stage being more differential than the previous stage, while incorporating the previous stage into it.

Interactionism - the product of interaction between the person and the environment. Variations in the environment affect the rate and terminus of moral development.

Kohlberg's early theoretical formulations resulted from an analysis of responses to hypothetical moral dilemmas. Twenty eight different aspects of morality were identified which were subsumed under the major headings of rules, conscience, welfare of others, self's welfare, sense of duty, role taking, punitive justice, positive justice, and motives. The distinctive form of the responses rather than the content led to the development of the stages. Six stages of development at three levels, the preconventional level, conventional level, and post conventional or principled level, were defined. Each stage represents a more highly developed, integrated, and autonomous conception of the aspects of morality than the

preceding stage (Kohlberg, 1971; Boyce and Jensen, 1978). In his more recent research Kohlberg has abandoned that aspect approach to scoring the responses to moral dilemmas. His scoring of the hypothetical dilemmas now focuses on the social perspective or the view one has of his relationship to society. The basic element in the development of moral maturity is the social perspective. The postulation of the six stages and their invariant development has remained intact over the course of Kohlberg's research since 1958. A complete discussion of the stages of moral development will follow later in this chapter.

Conditions for Moral Development. Like Piaget, Kohlberg does not concentrate on what an individual is doing but rather on the reason for choosing a particular course of action. Kohlberg stipulates that there is a parallelism between an individual's logical stage and his moral stage. While logical development is a necessary condition for moral development, it is not sufficient. Moral maturity requires cognitive maturity but it also requires further aspects of development, such as social experiences and exposure to diverse and challenging experiences. Kohlberg utilizes the concept of role-taking opportunities as an explanatory link between stage of logical development and stage of moral development. While a person may be able to operate at the highest stage of logical development, formal operations, he/she will be unable to operate at the conventional or principled stage of moral development without a sufficient amount of role-taking opportunities. Role-taking refers to those social experiences which involve taking the attitudes of others and developing an understanding and ability to relate to all the roles in the society of which one is a part (Kohlberg, 1971; 1975).

Essential to Kohlberg's theory of moral development is the claim that higher stages represent more differentiated and integrated ways of con-

ceptualizing a given situation and are morally more adequate because they are based on the principles of justice, reciprocity, and equality in human relations. Without sufficient opportunities for role taking an individual will not experience sufficient moral conflict which serves as a stimulant for moral development and advancement to higher stages.

Research conducted on the effects of exposure to moral reasoning on behavior demonstrates that in general when subjects are exposed to reasoning at stages other than their own they prefer statements at stages above their own to statements below (Turiel and Rothman, 1972; Kohlberg, 1969). This concept referred to as "plus one staging" has significance in understanding the stimulation of moral growth in adolescents and will be discussed in greater detail in Chapter Two.

Stages of Moral Development. A complete review of the literature regarding stages in moral development is contained in Chapter Two. This section is intended to introduce the concept. A stage is the logical organization or structure of thought which underlies the manifestation of moral judgments and results from the interaction of the individual and the environment.

Stages are characterized as follows (Boyce and Jensen, 1978, p. 101):

1. Stages are qualitatively different modes of thinking rather than increased knowledge of or internalization of adult moral beliefs and standards.
2. Stages form an invariant sequence. In the course of development individuals must progress through each of the lower stages before advancing to a higher stage.
3. Stages form an integrated whole. There is a general factor of moral stage which cuts across reasoning in all dilemmas.
4. Stages are hierarchical integrations. Each stage represents a

synthesis of the prior stages and the new elements.

5. Stages are viewed neither as a direct reflection of maturation nor as a direct reflection of learning, but are related to both.

6. Stages represent the equilibrated pattern of interaction between the individual and the environment.

Stage Change. The stages of moral development are summarized in Table 1. The process of stage change, the cornerstone of development, results from a process of self-regulated "progressive equilibration" (Langer, 1969; Turiel, 1965 and 1973). Individuals cannot be taught any stage directly because they must generate its principles themselves. Individuals who are faced with a problem or conflict situation which cannot be adequately resolved by their current stage or structure of thinking will begin to utilize the more advanced complex structures incorporated in higher level stages to which they have been exposed. However, if the conflicts presented are not related to either the individuals existing stage or to an emerging stage, they are not likely to have an effect.

Hypotheses

This study focused on the moral development of college students and on the scope of academic dishonesty on campus. The hypotheses tested were:

1. There is a positive relationship between college students' stage of moral development and the degree of seriousness with which they view academic dishonesty.

2. There is an inverse relationship between college students' stage of moral development and their participation in forms of academic dishonesty.

3. There is an inverse relationship between the degree of seriousness with which they view academic dishonesty and their participation in forms of academic dishonesty.

Table 1

Stages of Moral Development

LEVEL 1 PRECONVENTIONAL

At this level the individual is responsive to cultural rules and labels of good and bad, right or wrong, but he/she interprets the labels in terms of either the physical or hedonistic consequences of action (punishment, reward, exchange of favors) or the physical power of those who enunciate the rules and labels.

STAGE 1: Heteronomous Autonomy/Punishment and Obedience Orientation

The morality of obedience: "Do what you're told". The child does not share in making rules, but understands that obedience will bring freedom from punishment. Doesn't consider the interests of others. Actions considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.

STAGE 2: Individualism, Instrumental Purpose, and Exchange/Instrumental Relativist Orientation

The morality of instrumental egoism and simple exchange: "Let's make a deal". If each party sees something to gain in an exchange, then both want to reciprocate. Following rules only when in one's own immediate interest; acting to meet one's own interests and needs and letting others do the same. Aware that everyone has interests and that these can conflict.

LEVEL 2 CONVENTIONAL

At this level, the individual perceives the maintenance of the expectations of his family, group, or nation as valuable in its own right, regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, or actively maintaining, supporting, and justifying the order and identifying with the person or group involved in it.

STAGE 3: Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity/"good Boy"/"Nice Girl"

The morality of interpersonal concordance: "Be considerate, nice, and kind, and you'll get along with people". Living up to what is expected by people close to you. Desire to maintain rules and authority that support stereotypical good behavior. Aware of shared feelings, agreements, and expectations which take primacy over individual interests. Friendship relationships establish a stabilized and enduring scheme of cooperation.

STAGE 4: Social System and Conscience/The "Law and Order" Orientation

The morality of law and duty to the social order: "Everyone in society is obligated and protected by the law". All members of society know what is expected of them through public institutionalized law. Individual does right to keep the institution going as a whole and to avoid a breakdown in the system. The system defines roles and rules; considers individual relations in terms of the system.

LEVEL 3 POSTCONVENTIONAL OR PRINCIPLED

The individual makes a clear effort to define moral values and principles that have validity and application apart from the authority of the groups or persons holding them and apart from the individual's own identification with the groups.

STAGE 5: Social Contract or Utility and Individual Rights

The morality of societal consensus: "You are obligated by whatever arrangements are agreed to by due process procedures". Formal procedures are institutionalized for making laws. Concern that laws and duties are based on rational calculation of overall utility, "the greatest good for the greatest number". Considers moral and legal points of view; recognizes that sometimes they conflict and finds it difficult to integrate them.

STAGE 6: Universal Ethical Principles

The morality of non-arbitrary social cooperation: "How rational and impartial people would organize cooperation is moral". Particular laws or social agreements usually valid because they rest on ethical principles; when laws violate these principles one acts in accord with principles of justice, equality of human rights, and respect for the dignity of human beings as individuals. A scheme of cooperation that negates or neutralized arbitrary distribution of rights and responsibilities is the most equilibrated.

Summarized from Rest, 1975, 1979; Kohlberg, 1971.

In addition several ancillary issues were explored but no hypotheses regarding these issues were offered. These issues were concerned with the relationship between:

1. the stage of moral development of college students and the reasons why students cheat;
2. the stage of moral development of college students and their reporting behavior;
3. the stage of moral development of college students and the demographic variables of age, gender, place of residence, academic division, class standing, number of hours spent in extracurricular activities, and number of hours spent in employment;
4. participation in academic dishonesty by college students and the seven demographic variables listed;
5. the degree of seriousness with which college students view academic dishonesty and the seven demographic variables listed;
6. the reasons college students offer when they cheat and the seven demographic variables listed;
7. the reporting behavior of college students regarding academic dishonesty and the seven demographic variables listed.

Summary

The purpose of this chapter was to introduce the study, define critical terms, and introduce the theoretical framework of the cognitive-developmental approach to moral development.

An understanding of cognitive moral development is important to this study because of the relationship between stage of moral reasoning and action. Research findings suggest that the way in which a person reasons about moral issues affects his actions, choices, and preferences in day-to-day living.

This understanding of moral development provides a useful framework for considering the matter of academic dishonesty among college students.

Organization of the Study

This chapter described the purpose of the study, outlined the problem, defined critical terms, listed the hypotheses and ancillary issues, and discussed the overall theoretical framework for the study. The following chapter contains a review of the literature pertinent to this study. The major areas reviewed include: developmental issues of college students, cognitive-developmental theory, and the literature pertaining to academic dishonesty and cheating. Subsequent chapters review the research design of the study, discuss the research findings, and the implications and conclusions of this study.

Chapter Two

Review of the Literature

This research study was conducted in an attempt to increase our understanding of the moral development of college students and of the extent and scope of academic dishonesty on campus. The theoretical framework selected was the cognitive-developmental approach to moral development. A review of research related to this topic is reported in this chapter. The chapter has been organized into three main sections: (1) theories of college student development, (2) the cognitive-developmental approach to moral development and, (3) academic dishonesty and cheating.

Theories of College Student Development

Since the purpose of this study was to increase understandings of the moral development of college students and of the extent and scope of academic dishonesty on campus, the following overview of student development theories is included to provide a context for understanding the importance of cognitive moral developmental theory in student development.

Within the last twenty years scholars in higher education have described the purpose of higher education as more than just acquiring information and developing intellectual competence. The early work of Williamson (1961), Sanford (1962), and Feldman and Newcomb (1973) encouraged educators to become concerned with educating the "whole person" and discovering more about the impact of college on students. Sanford argued that the college environment should enable the student to encounter the appropriate challenges and support for development (Sanford, 1966; Sanford and Axelrod, 1979). As a result of efforts to identify elements of the collegiate experience and the college environment, a body of research and theory evolved

which described the ways in which adolescents matured and developed into adulthood.

Theories of student development, like other scientific theories, are never finalized. They are always open to critique, modification, and adaptation depending on the outcomes of continual research on the topic. Several criteria for assessing the quality of a theory have been developed. According to Knefelkamp (1978) an adequate theory of student development should be: descriptive, that is, it should tell us the characteristics of a mature individual; explanatory, it should account for or help explain the human condition or behavior; prescriptive, it should outline the necessary conditions for a person to expand and become more mature; and heuristic, it should be readily understandable by the persons who need to use the theory.

Knefelkamp, Widick, and Parker (1978) attempted to consolidate the wide variety of student development theories into a comprehensive model. They concluded that "...the search for a grand design is always ill-fated; we did not find nor could we create the comprehensive model of student development" (Knefelkamp, Widick, and Parker, 1978, p. xi). They did determine that the existing theories seem to cluster into five categories with each of the categories sharing a basic set of assumptions. The five categories including psychosocial theories, cognitive developmental theories, maturity models, typology models, and person-environment interaction are briefly summarized below.

Psychosocial Theories

Building on the work of Erik Erikson, psychosocial theorists suggest that development follows a chronological sequence and that at certain times of a person's life particular aspects of the personality emerge as concerns

to be addressed. The society and culture in which the individual lives influence the timing and the ways in which the particular concerns are addressed. Chickering (1969) sees the traditional age college student in a distinct psychosocial phase defined by the emergence of certain capabilities and needs which interact with the demands of a particular environment.

Chickering identified what he called "vectors of development" which were considered to have direction and magnitude. The direction was best expressed as a spiral or steps rather than a line. The seven "vectors of development" identified by Chickering include achieving competence, managing emotions, becoming autonomous, establishing identity, freeing interpersonal relationships, clarifying purposes, and developing integrity. According to Chickering, adolescents become adults as they develop in each of these areas. The environment provides the challenges or stimulation which encourages new responses and ultimately brings about developmental changes (Chickering, 1969; Knefelkamp, et al, 1978). Examples of other psychosocial theorists include Sanford, Katz, Marcia, and Keniston.

Cognitive-Developmental Theories

Piaget, Kohlberg, Perry, Loevinger, and Harvey, Hunt and Shroeder are the most prominent cognitive-developmental theorists. Their model describes development as a sequential and irreversible progression through stages. The stage or cognitive structure develops as a result of the mind's organization of the stimuli received from the environment. The process of developmental change results from the individual's interaction with problems, ideas, conflicts, that require that they modify their way of thinking to a more adequate, advanced stage.

Maturity Models

The work of Douglas Heath is an attempt to empirically define maturity

and describe the nature of the maturation process (Widick, Parker, & Knefelkamp, 1978, P. 79). His model specifies four self systems and five growth dimensions and suggests that maturation involves movement along the growth dimensions in each of the four areas of self. The four self systems, intellect, values, self-concept, and interpersonal relationships interact with the growth dimensions of increased potential for symbolization, becoming allocentric, becoming integrated, becoming stable, and becoming autonomous to form a matrix of the mature personality.

Typology Models

Typology theorists suggest that there are persistent individual differences such as temperament, cognitive style, or ethnic background, which interact with development. Roy Heath identifies three personality types which describe the way in which an individual regulates the "dynamic tension" between the inner self and the rational self. His model integrates developmental level (maturity) with temperamental style (personality type) to present a holistic conceptualization of the self (Knefelkamp, et al, 1978, p. 94). The model suggests that different types of students respond to different sources of support and challenge for growth.

Person-environment Theorists

Lewin, Pace & Stern, Clark & Trow, and Holland focus on the "needs" of the person and the "press" of the environment. The person/environment theorists are concerned with the relative congruence or dissonance between the person and the environment. The environment for these theorists refers to the psychological environment as well as the physical surroundings. The way in which an individual perceives his physical surroundings is as important as the actual surroundings. The person is conceptualized by

the person/environment theorists in terms of personality types, individual preferences and interests, or orientation. An implicit assumption about the person/environment relationship is that people tend to enter and participate in environments consistent with their personal characteristics. A relatively congruent person/environment relationship provides an individual with a satisfying and fulfilling experience; while a dissonant relationship is considered likely to thwart personal development (Walsh, 1973).

Summary

All five groups of theorists, albeit in somewhat different ways, focus on the importance of the interaction of the individual with the environment and the fact that various amounts of challenge and support facilitate development. The importance of the theories is summarized by Kniefelkamp et al (1978) "Theories have become sources of awareness to us, ways of organizing our thinking about students, suggestions of areas for exploration, and helpful insights about possible courses of action" (p. xiv).

A more complete review of the literature in the area of the cognitive-developmental approach to moral development follows.

Cognitive-Developmental Approach to Moral Development

This section of the literature review is intended to outline the theoretical framework for the study on the moral development of college students and the extent and scope of academic dishonesty on campus. Topics to be discussed in this section are: a historical overview, cognitive-developmental theory, stages in moral development, relation of moral judgment to moral action, measurement of moral judgment, and critiques of the theory.

Overview

The origins of the current research on moral development were discussed in Chapter One. A discussion of the more contemporary research is included here to provide an adequate context.

The current moral development research began in 1955 with Lawrence Kohlberg's dissertation research (1958). That research continued over a fifteen year period and interviewed the same group of 75 boys at three year intervals from their early adolescence to adulthood. The original longitudinal study was supplemented by a series of studies in other cultures including Turkey, Yukatan, Taiwan, and Mexico. As a result of the analyses of the subjects' responses to the hypothetical moral dilemmas Kohlberg defined six stages of moral development at three levels: pre-conventional, conventional, and postconventional or principled. He also determined that there is a culturally-universal, invariant sequence of stages in moral judgment (Kohlberg, 1971).

Other scholars (Turiel, 1966; Kohlberg and Kramer, 1969; Krebs, 1967; Rest, 1979) working with Kohlberg at the University of Chicago contributed significant research which confirmed and elaborated on the initial moral development research. In addition to confirming and defining the theory, implementation in practice and programmatic interventions resulted from the research. The Center for Moral Education was established at Harvard University and scholars from Chicago and Columbia joined Kohlberg to continue the work there. In 1970, Kohlberg concluded what he refers to as the first phase of the moral development research and entered into the second phase - the methodological phase - and an attempt to revise his system of scoring moral judgments (Kohlberg, 1979). At about the same time Rest left Harvard to begin his methodological research at the University of Minnesota. At Minnesota he developed the Defining Issues Test, a mul-

multiple choice instrument for assessing moral judgment stage. The continuing research on the DIT is the focus of Rest's (1979) recent book.

In 1978 Kohlberg and the Harvard group completed a new version of the scoring system. The new scoring system manages the inherent problems of interview data analysis by effectively defining a unit of analysis, developing an adequate taxonomy, and relating the discriminations used for scoring to theoretically meaningful categories (Rest, 1979, p. 10).

As a result of the most recent work by Kohlberg and Rest two major distinctions have been drawn. Kohlberg asserts that moral reasoning progresses in discrete stages while Rest prefers to represent a subject's progress in terms of increases in higher stage thinking and decreases in lower stage thinking. In addition to this controversy over continuity/discontinuity, there is also a difference of opinion as to whether Rest's stage scheme confuses content with structure. In spite of these differences both theorists stand together in endorsing the six stage progression as empirically sound. The differences noted in the recent research do not alter the theory's applicability and validity for the study reported here (Justice, 1977; Rest, Davison and Robbins, 1978; Rest, 1979).

Cognitive-Developmental Theory

A cognitive theory has been defined by Baldwin (1969) as a "theory of human behavior which postulates a general cognitive mechanism as the initial step in the chain of events leading from stimulus to response" (p. 328). The essential point is that the information is received, coordinated, and integrated into some kind of representation. As defined earlier, the cognitive-developmental theory, pioneered by Piaget, postulates that as a result of the interactions between the individual and the environment certain basic mental or cognitive structures or stages develop. The cognitive stages were characterized as representing distinct or qualitative differences

in modes of thought; forming an invariant sequence or order; and representing a hierarchical integration (Kohlberg, 1969).

Piaget. Jean Piaget was concerned with the reasoning process used by children. As result of his studies he concluded that the different uses of logic could not be attributed simply to older children knowing more because they were taught more. He concluded that the difference was developmental, that as children matured and gained more experiences in the world, they grew in their capacity to understand relationships (Hersh, Paolitto, and Reimer, 1979).

Piaget identified four stages of cognitive development; sensorimotor (birth to 2 years); preoperational (2-7 years); concrete operational (7-12 years); and formal operational (age 12 to adult) (Boyce and Jensen, 1978). As an outgrowth of his earlier work with the cognitive-development of children Piaget began to conceptualize his theory of moral development. He identified two separate moralities. The first one, heteronomy, was considered a morality of constraint in which the child views the adult's will as the final authority. In the transition stage the child no longer gives his allegiance to the adult authority but begins to pay attention to rules. This transition stage ultimately leads to the second morality, autonomy. At this stage the child is able to objectively judge the moral acts and commands of others and moral judgments come from within the individual rather than from without (Boyce and Jensen, 1978, pp. 91-93). Two of Piaget's conclusions have significantly influenced the cognitive-developmental approach to moral education. He determined that cognitive development was a necessary but not sufficient condition for moral development and that social experience and peer interaction were a necessary condition for moral development (Boyce and Jensen, 1978).

Kohlberg. Contemporary research in the area of moral development

began with Lawrence Kohlberg's longitudinal study of a group of 75 boys (aged 10-16 at the beginning) who were interviewed at three year intervals throughout their adolescence. As a result of his analyses of the responses to the hypothetical moral dilemmas the six stages of moral development were developed. A summary of the stages is included in Chapter One Table 1. Kohlberg replicated his studies in other cultures and determined that the youngsters while responding with different content used a distinctive structure to respond to the dilemmas. In all cultures comparable structures were used to respond (Kohlberg, 1971).

Stage Constructs. As a result of these cross-cultural and longitudinal studies conducted by Kohlberg and his associates it can be concluded that stages are more than age trends. First, stages imply an invariant sequence. Individuals may move through the stages at varying speeds and may terminate at any stage of development. However, if an individual continues to move upward he/she must move in accord with these stages (Kohlberg, 1969; 1971). These findings have been substantiated by subsequent researchers (Turiel, 1966; Rest, Turiel, Kohlberg, 1969).

Second, stages define "structured wholes", that is an individual who is stage 3 in one situation will be stage 3 in another situation. Kohlberg acknowledged that an individual is not entirely in one stage; he reported that children were usually 50% in their major stage with the remainder in the two adjacent stages (Kohlberg, 1971, p. 171).

Third, the sequentiality of stages persisted under different cultural conditions. This important finding concluded that moral development is not simply a matter of learning the norms of the culture. In all cultures studied Kohlberg ascertained that the same basic ways of valuing are found in every culture and develop in the same order (Kohlberg, 1971). Turiel (1973) supports Kohlberg's finding concluding that if morality were a

reflection of the internalization of a culture the data should have reflected more homogeneity within cultures rather than age related sequential changes and greater dissimilarity among cultures rather than the same sequence of stages.

Essential Conditions for Moral Development. Earlier work by Piaget and Kohlberg concluded that most individuals are higher in logical stage than in moral stage. A person who was concrete operational would be limited to the preconventional moral stages (Kohlberg, 1975, pp. 48-49).

The relationship between stage of cognitive development to moral development has been demonstrated by the high correlations and systematic relationship between the two areas (Tomlinson-Keasey and Keasey, 1974). Subsequent research confirms the relationship between cognitive and moral development and the fact that cognitive development facilitates moral development. A time lag or "decalage" is reported between the acquisition of logical operations and their applicability to morality. It is assumed that the lag results from the need for the cognitive transformation to consolidate before it transforms to reasoning in the moral area (Keasey, 1975; Tomlinson-Keasey, 1975; Hersh, Paolitto, and Reimer, 1979).

Another critical element to moral development is the importance of social experience. While the research pertaining to stage progression will be reviewed in the next section, the concept of role-taking deserves mention in this overview of the theory. As mentioned earlier, cognitive-developmental theories are interactional, that is, the basic mental structure or stage results from the patterning of interaction between the individual and the environment (Kohlberg, 1969). Moral development is the result of an increasing ability to perceive social reality or to organize and integrate social experience. The main experiential determinants of moral development are the amount and variety of social experiences, the

opportunity to take a number of roles, and to encounter other perspectives (Kohlberg, 1972).

A study by Smith (1978) considered the relations between the development of logical thinking, role taking, and moral reasoning in a sample of 100 children aged 8-14. Evidence from this study supports an order of development within the three areas with logical thinking or cognitive development, preceeding role-taking, preceeding moral reasoning (p. 46).

Summary. The preceeding discussion of the cognitive-developmental approach to moral development can be summarized as follows. Moral judgment increases in complexity as one develops intellectually. This process of development represents a qualitatively different orientation, perspective, or ability for role-taking. The structure, rather than the content of moral thinking at each stage is the focus of attention and analysis. Each stage represents a point of equilibrium, a point where the interaction between the individual and the environment has stabilized for the time being (Smith, 1978, p. 78).

Stages of Moral Development

The importance of the research in this area of moral development suggest that it is appropriate to review it in a separate section.

Stage Characteristics. As mentioned in Chapter One stages are characterized as follows (Boyce and Jensen, 1978, p. 101):

1. Stages are qualitatively different modes of thinking rather than increased knowledge of or internalization of adult moral beliefs and standards.
2. Stages form an invariant sequence. In the course of development individuals must progress through each of the lower stages before advancing to a higher stage.
3. Stages form an integrated whole. There is a general factor of

moral stage which cuts across reasoning in all dilemmas.

4. Stages are hierarchical integrations. Each stage represents a synthesis of the prior stages and the new elements.

5. Stages are viewed neither as a direct reflection of maturation nor as a direct reflection of learning, but are related to both.

6. Stages represent the equilibrated pattern of interaction between the individual and the environment.

Process of Stage Change. Research on the process of stage change, the cornerstone of moral development, has been abundant. The following sequence summarizes the process of progression from one stage to another: relative cognitive equilibration; conflicting structural elements are experienced; relative cognitive equilibration is disrupted; followed by an attempt to restructure in order to reestablish equilibration (Keasey, 1969, p. 12).

As a follow-up to the original Kohlberg research Blatt (1965) conducted research to ascertain what conditions were most likely to induce development in a group of students. As a result of the student's participation in the structured discussion groups 1/4 to 1/2 of the students moved partially or totally to the next higher stage (Sharf, 1978, pp. 2-4).

Kohlberg and Turiel (1971) concluded that in order to stimulate change toward spontaneous use of the next stage the child must experience and understand the inadequacies of his own thinking (Kohlberg, 1971; Kohlberg and Turiel, 1971).

The importance of a child's own stage of development as the basis from which change occurs was highlighted by Turiel (1966) and Blatt and Kohlberg (1971). Turiel concluded that groups exposed to reasoning one stage above their own assimilated more new thinking than did either groups exposed to reasoning two stages above or one stage below. Subsequent studies aimed

at testing whether Kohlberg's stages constitute an order of increasing psychological difficulty for children went somewhat further than Turiel. Subjects were asked to recapitulate prototypic statements of each of the stages. A correct paraphrase was evidence that the subject could comprehend the stage's way of thinking. In addition subjects were asked to rank and rate the prototypic statements as a way of assessing their preference for a particular stage of reasoning. Subjects tended either to get all hits for the recapitulated statements or all misses which justifies talking about comprehension of a stage as a whole. If a subject showed high comprehension for a given stage, he also showed high comprehension for all the preceding stages. Comprehension scores were high up to the subjects own predominant stage and then progressively decreased. In the preference area, it was found that insofar as subjects comprehend various stages of thinking they tend to prefer the highest comprehended and that virtually all subjects tended to prefer the highest stage in their developmental order. For example, they prefer stage 6 more than stage 5 more than stage 4, etc. (Rest, Turiel, and Kohlberg, 1969; Rest, 1973). These studies support the claim that each succeeding stage is more cognitively differentiated and integrated than the previous one. The factors of comprehension and preference largely account for the stage at which a subject is actually producing moral judgments. Evidence of developmental decalage is also present. Subjects appear to first prefer, then comprehend, and finally spontaneously produce judgments at the next higher stage (Rest, 1973, p. 107).

Kohlberg (1972) reported that most people are consistent in their use of a single stage of thinking with 50% of the statements corresponding to a dominant stage and the remainder generally corresponding to the stage below and above. As a result of further review and analysis of Kohlberg's

longitudinal data, Rest (1975) questioned the claim that directional change is necessarily step by step. Based on longitudinal studies conducted using the Defining Issues Test Rest demonstrated that while the group as a whole ($N = 88$) showed increases in the higher stages as measured by P scores, fifty-one (51) subjects showed upward change, that is, gains in higher stages were made at the expense of lower stages; 8 subjects showed downward movement; and 12 had ambiguous findings (Rest, 1975, p. 745). Based on the research conducted with the DIT, Rest argued for a more complex conception of the stage model of development. He urged that directional change not be viewed as proceeding step by step, one step at a time, but rather as a shifting distribution of responses whereby lower stages decrease while higher stages increase (Rest, Davison, and Robbins, 1978, p. 263).

Findings reported by Davison, Robbins, and Swanson (1978) provided evidence in support of Kohlberg's sequential and hierarchical structure and indicated that moral judgment proceeds by the gradual replacement of lower stage reasoning by higher stage reasoning.

Stage "A". Another finding of the research which should be discussed is the phenomenon reported by Kohlberg and Kramer (1969) which indicated that in an earlier study conducted by Kramer, 20% of the subjects who had previously been assessed at stage 4 or 5 subsequently were assessed at stage 2. This apparent regression occurred between late high school and the 2nd or 3rd year of college. By age 25 each of the retrogressors returned to either a stage 4 or 5. Research reported by Turiel (1975) indicated that the transition from conventional stage 4 thinking to postconventional stage 5 thinking involves a major restructuring of the individual's cognitive structure. The transition involves a phase of conflict or disequilibrium that causes responses to be characterized by inconsistency, conflict, and internal conflict. The development from stage 4 to 5 requires

a transition stage labelled as either $4\frac{1}{2}$ or "A" for antiestablishment (Kohlberg and Turiel, 1973; Turiel, 1975; Haan, 1971). This transition stage was incorporated into the design of the DIT by Rest.

Moral Growth. What experiences stimulate moral growth? As mentioned earlier new ways of moral thinking cannot be imposed upon an individual. Stage change is based on the individual's active reorganization of his experience and is stimulated by conflicts. The induction of cognitive disequilibrium by means of any of several procedures will cause an individual to seek resolution of the conflict. Disequilibrium in the context of cognitive-developmental theory goes beyond conflict "per se". In order for the conflicts to have an effect they must be related to the individual's existing and emerging stages (Langer, 1969; Turiel, 1973).

In the following section, the literature pertaining to the relationships between stage of moral judgment and moral action will be reviewed.

Relation of Moral Judgment to Moral Action

Particularly relevant to this study is the research conducted on the relationship between stage of moral judgment and moral action or behavior. Of critical importance to persons interested in and working with moral development is the actual behavior of the individual in different situations.

The research reviewed concludes that moral judgment is not synonymous with moral action. Many factors influence moral behavior. However, Kohlberg (1975) argues that moral judgment is the only distinctively moral factor in moral behavior. Moral judgment is considered to be a necessary, if not sufficient, condition for moral action (Kohlberg, 1971).

Based on a review of the literature it seems safe to agree with the conclusion that researchers do not know precisely how moral judgment relates to behavior; however there is a relationship (Kohlberg, 1971, DePalma

and Foley, 1975; Boyce and Jensen, 1978; Smith, 1978). Rest (1979) states, "Moral judgment as a psychological variable has a limited role in the explanation of moral action -- it may be a star role but it is only one player in a large cast" (p. 170). The relationship between moral judgment and action is most clear when the stage of moral development is theoretically related to the type of moral decision being considered. In other words, a particular kind of behavior becomes relevant only in the range of development where the individual can have a reason to support the moral action. Krebs (1967) reported that Kohlberg's scale of moral judgment was related to several measures of moral behavior including delinquency, teacher ratings, and moral autonomy (p. 6). Turiel (1973) reported on a study of 35 University of Michigan students conducted by Brown, Feldman, Schwartz and Heingartner (1967). Subjects were divided into conventional and principled groups based on Kohlberg's index. Individuals at stages 5 and 6 were less likely to cheat than individuals at stages 3 and 4 who were less likely to cheat than those at 1 and 2 (Turiel, 1973, p. 750).

Turiel and Rothman (1972) examined the effects of exposure to moral reasoning on behavior with a group of junior high students. They found that exposure to reasoning at "plus 1" stage and "minus 1" stage had different effects on the behaviors of subjects at stages 2, 3, and 4. They concluded that subjects who have attained stage 4 provide different behavioral responses than those subjects who have only attained stage 2 or 3. The researchers hypothesized the differences observed may have been associated with the cognitive dimension, that is the stage 4 subjects were also more cognitively advanced than the stage 3 subjects and were better able to integrate their choice with their behavior.

Krebs (1967) testing 6th grade subjects in a contrived cheating situation found that 75% of the conventional and preconventional students

cheated on at least one of the 4 experimental cheating tests. Only 20% of the stage 5 students cheated. In a study conducted at the college level, only 11% of the principled subjects cheated in contrast to 42% of the subjects below stage 5. Kohlberg interprets these results to mean that situational factors are a greater determinant to moral behavior at the conventional levels than at the principled levels. He believes that the cognitive aspects of moral judgment define the situation for the individual and thus play a strong causal role in behavior (Kohlberg, 1972).

The cheating research indicates that while conventional moral judgment is a guarantee of core social conformity to external authority, in the absence of sanctions, observation, and group disapproval, there is no guarantee that internal moral norms will prevail. While cheating itself is not a sign of low maturity of judgment, consistent noncheating is a clear sign of maturity in moral judgment (Kohlberg and Turiel, 1971).

In the Milgram studies undergraduate students were instructed to administer increasingly severe electrical shocks to a "victim". In this situation the principles of stage 5 reasoning do not clearly prescribe a decision. Allegedly both victim and subject had freely agreed to contract for participation in the experiment. In this experiment only stage 6 thinking defined the situation as one in which the experimenter did not have the moral right to inflict suffering on the victim. As a result 75% of the students at stage 6 stopped shocking the victim as compared with only 15% of the other subjects (Kohlberg, 1971).

Another frequently cited study was conducted by Haan, Smith and Block (1968) regarding a civil disobedience decision. Students interviewed were faced with a sit-in at the administration building in the name of political freedom of speech. For stage 6 students the issue appeared to be a principled one and 80% of them chose to sit in. About 50% of the stage 5 sub-

jects also participated but only 10% of the stage 3 and 4 subjects participated (Kohlberg, 1971, pp. 78-79).

The results of a related dissertation on developmental issues in the disciplinary setting conducted on college students demonstrated that the judgments made by students in a naturalistic setting do have a relationship to the students' level of moral judgment (Smith, 1978, p. 332).

Summary. The research appears to support the following generalizations: persons operating at the principled stages of moral judgment tend to act with greater consistency in their judgments; there is a relationship between moral judgments, beliefs, values, and behavior; changes through persuasion or verbal interaction can influence behavior; and the stage level of the message is important in determining the amount of behavioral change that occurs (Boyce and Jenson, 1978, p. 119). It is important to note, however, the reservation raised by Hersch, Paolitto and Reimer (1979). They caution against attempting to generalize from studies with relatively straight-forward choice situations, such as the cheating studies, to behavior in less structured decision making situations. They argue that particular settings play an important role in promoting consistency between judgment and action.

Measurement of Moral Judgment

The following section on approaches to the measurement of moral judgment places considerable emphasis on one of the instruments used in this study, the Defining Issues Test.

Kohlberg's dissertation, a replication of Piaget's work, provided a new method of assessing moral judgment. He presented children aged 10-16 with complex hypothetical dilemmas instead of Piaget's story pairs. He then conducted a semi-structured interview in which he asked the subjects what they thought should be done and why. The scoring system used to code

the responses has been considerably revised since 1968 (Rest, 1979, pp. 9-10). The interview method had several limitations, the major one being that the interpretation of the subjects responses was influenced by a variety of subjective factors.

The Defining Issues Test. In response to the need for a practical, validated, objective alternative to the interview approach and in order to assess a subject's stage as a continuous variable James Rest developed the Defining Issues Test (DIT) (Justice, 1977).

A basic assumption of the DIT research has been that the way of defining social-moral dilemmas and of evaluating the crucial issues varies among the stages in accordance with Kohlberg's theory. The DIT consists of six moral dilemmas, each with twelve comments related to the dilemma. Subjects are then asked to rate and rank the comments in terms of the importance of each consideration in deciding what ought to be done (Alozie, 1976). Only the ranking data is used in scoring the test (Martin, Shafto and Van Deirse, 1977).

In the construction of the DIT Rest deliberately avoided having an equal number of items for each stage. Stage 1 items were omitted entirely because the reading level required for the instrument is too advanced and it is very unlikely that a subject at Stage 1 could complete the instrument. Based on this assumption that subjects are more advanced, there is also only a limited number of stage 2 items. There are an approximately equal number of items for stages 3, 4, 5A, 5B, and 6. Rest arranged the items so that the low stage items appear before the later stage items in order to enable lower stage subjects to locate their own ideas easily and to avoid projecting their thinking to a higher stage item.

Care was taken to match the statements on word length, syntax, and use of specialized terminology. Several meaningless but complex-sounding

items called "M" items are included in each dilemma. These are used as a check on subjects who endorse an item because of their pretentiousness rather than their meaning. If a subject accumulates too high an "M" score the questionnaire must be discarded (Rest, 1979, p. 92).

To detect random checking Rest incorporated the Consistency Check which compares a subject's rankings at the bottom of the page with the ratings. If the number of inconsistencies are excessive the questionnaires are discarded. Rest estimates that approximately 2-15% of the questionnaires are lost based on the M score and the Consistency Check (Rest, 1979, p. 93).

Validity and Reliability. Construct validity for the DIT has been based on seven criteria including: face validity, psychometric validity; criterion group validity; longitudinal validity; convergent-divergent validity; validation through experimental enhancement studies; and validation through experimental manipulation of test-taking sets (Rest, 1979).

Test-retest reliability over a two-week period was reported at a .81 level (Rest, Cooper, Coder, Masanz, and Anderson, 1974). In the same study, Rest found a .68 correlation between the results of the DIT and Kohlberg's interview technique.

As an objective measure of moral judgment one would be concerned about a subject's ability to "fake" their scores. McGeorge (1975) reported that subjects in his study were unable to fake high when instructed to take the DIT as someone with the highest principles of justice, but were successful in faking lower when instructed to take the test as "someone with no sense of justice." Similar results were reported by Napier (1979) who concluded that subjects were unable to fake high scores and also that knowledge of cognitive moral development theory did produce somewhat higher P scores in both experimental groups. These results tend to support the contention that subjects recognize the stages they have passed through as immature and

can respond appropriately when asked to fake lower stages. However, reasoning in stages above their own is inaccessible to them and they are unable to fake upwards.

Scoring Indices for the DIT. A considerable amount of analysis has been done on the development of the most appropriate scoring indices for the DIT. Cooper (1972) examined 88 different ways of indexing the DIT and recommended the P score. The P index, interpreted as the relative importance given to principled thinking in making moral decisions, is calculated by adding together the scores of Stages 5A, 5B, and 6. Research reported by Rest (1979) concludes that the P index showed better results in the validity studies as well.

Another way of indexing development is to stage type subjects in terms of exceptional use of a stage rather than predominant use. This index avoids the assumption of the simple stage model. "Exceptional amount" is defined as a standard deviation above the mean (Rest, 1976, 1979). The data collected in this study was analyzed using both the P-score and the exceptional use stage.

Davison (1979) has recently completed the development of the "D" index. Since all of the research prior to 1976 has used the P index and because the "D" index was not used in this study, it will not be discussed further. Follow up research to this study should consider an analysis of the data using this new index.

Relationship between DIT and Age. Based on a review of cross-sectional and longitudinal studies using the DIT, Rest (1979) concludes that the number of years in school and age are related to the way individuals judge moral dilemmas. Students completing high school and attending college show the most dramatic change. Adults' development slows down in their 20's and plateaus after leaving school. Individuals who continue their education,

particularly in disciplines that emphasize moral considerations, attain much higher DIT scores (Rest, 1979, p. 143).

Relation of DIT to Kohlberg. Because the DIT is derived from Kohlberg's general stage scheme the relation of the DIT to Kohlberg's test is of particular interest. Studies reviewed by Rest (1979) indicate that the DIT is not equivalent to Kohlberg's test. Although the DIT research differs from Kohlberg on matters of research strategy and method, in some details of stage definition, and in the stringency with which the stage concept is used as a model of development, the convergences and similarities are still apparent (Rest, Davison, Robbins, 1978, p. 277).

Four design differences which may account for the discrepancies between the two methods are (1) the different methods of indexing; (2) the use of different dilemmas; (3) use of somewhat different stage characterizations; and (4) the use of different tasks. Kohlberg requires spontaneous production and the DIT is primarily a recognition task. This last difference is considerable and accounts for the fact that the DIT assesses subjects at a somewhat higher stage than Kohlberg's test. As discussed in an earlier section, subjects are able to comprehend a higher stage earlier than they are able to spontaneously produce judgments at the higher stage (Alozie, 1976; Panowitsch, 1975; Rest, 1979).

Summary. The research has demonstrated that the DIT has certain methodological advantages and that it is an effective measure of moral development. The evidence presented led to the selection of this instrument for the current study on moral development of college students and academic dishonesty.

In the final section of the Cognitive Developmental Approach to Moral Development, the criticisms of the approach will be discussed.

Critique of the Theory

As indicated earlier, theories of student development like other scientific theories are never finalized. They are always open to criticism, modification and adaptation depending on the outcomes of continual research. The cognitive-developmental approach to moral development is no exception and several critical discussions of the research are reviewed here. It is important to note that many of these criticisms were considered by James Rest as he refined the research on moral judgment utilizing the Defining Issues Test and were incorporated into his recent book Development in Judging Moral Issues. It is too soon to ascertain whether or not his responses will be considered satisfactory by the critics.

Overall critiques of the theory were based on Kohlberg's cross-cultural data and his failure to report the complete data in a conventional format (Simpson, 1974). Failure to share the complete data made it impossible for other researchers to validate his conclusions. The unavailability of research data, the ambiguous or confusing discussion of important concepts such as the "from is to ought" discussion, and the emphasis placed on the principle of justice are among the major criticisms (Hall and Davis, 1975; Codd, 1977).

Gibbs (1977) concluded that stages 1 through 4 were appropriately considered Piagetian developmental stages but that stages 5 and 6 were not universal because of the domination of the existential theme.

Other researchers (Hogan, 1973; Peters, 1978; Hogan and Dickstein, 1971) argued that the theory failed to adequately describe the parallel development of the affect with cognitive development and neglected the function of socialization in the development of mature moral judgment.

Kurtines and Grief's (1974) review of Kohlberg's theory and assessment technique was particularly negative. Kohlberg writing in the Preface

to Rest's new book claims that Kurtines and Grief's observations about the limitations of the methodology were similar to the conclusions he had reached and which resulted in both he and Rest undertaking a conscientious effort to improve the methodology (Rest, 1979, p. x).

In general Kohlberg's work was commended for attracting attention to the area of moral education. However psychologists were more in accord with the descriptions of the construct than were the philosophers (Kincaid, 1977).

Summary

This section of the literature review has discussed several aspects of the cognitive-developmental approach to moral development including a historical perspective, overview of the theory, stages in moral development, the relationship between moral judgment and moral action, measurement of moral judgment, and finally, critiques of the theory. Before beginning a review of the academic dishonesty literature a brief summary of the principles of moral development is appropriate (St. Claire, 1975).

1. Development consists of a natural, invariable sequential stage transformation.
2. Development results from a structural progression of qualitatively different stages toward more equilibrated judgment modes.
3. Development consists of self-constructed and self-regulated stage transformations. Because the individual must generate the higher stages, development takes time.
4. Development is directly influenced by an individual's stage.
5. Development of moral judgment requires the attainment of certain rational operations. The rational operations however are not sufficient conditions for the development of mature moral judgments.
6. Development is determined by the experiences and stimuli which

come from the interaction between the individual and the environment.

7. Development requires a variety of social experiences including an opportunity to encounter different perspectives and roles. Development requires moral conflict in order for the individual to recognize the inadequacy of the lower stage.

Academic Dishonesty

History of the Problem

While the present study on the moral development of college students and academic dishonesty was prompted by the Carnegie Council's expressed concern for the significant and apparently increasing amounts of cheating by students in academic assignments, the issue is not a new concern for higher education. In a 1931 study of academic dishonesty at a large southern state university Campbell (1933) concluded that 56% of the subjects cheated. A few years later, Parr (1936) conducted a study of the frequency of cheating in a typical college classroom and concluded that 42% of the students took advantage of the opportunity to cheat. Drake (1941) concluded that the crux of the academic dishonesty problem stemmed from competition for grades and urged higher education to become concerned with changing student motives for learning. In an extensive survey of academic dishonesty, Bowers (1964) determined that academic dishonesty was considered to be the second most serious form of student misconduct. His findings suggested that while students varied in the extent to which they disapprove of cheating, they agreed that it was wrong on moral grounds; that most college students regard academic dishonesty as a deviant behavior; and, that normative constraints from peers had a much more pronounced effect on cheating than did personal value orientations.

One of the most thorough research efforts on the topic of honesty

was undertaken by Hartshorne and May in the late 1920's. Their findings concluded that: almost everyone cheats some of the time; because an individual cheats in one situation does not mean he will cheat in another; people's verbal opinions about honesty have little to do with how they behave; the decision to cheat is largely determined by expediency; and, honest behavior is largely determined by factors of group approval and example (Kohlberg and Whitten, 1972, p. 10).

As a result of the classic Hartshorne and May studies, the "doctrine of specificity" evolved. The doctrine of specificity stipulated that there was little evidence for a trait of honesty and theorized that the predictability of an individual's behavior from one situation to another depended on the number of identical elements which the situations shared (Zastrow, 1970; Burton, 1976).

Upon subsequent analysis of the original Hartshorne and May data, Burton (1963 and 1976) asserted that a reconsideration of the doctrine of specificity was warranted. His analysis concluded that a person brings an underlying trait of honesty to a resistance to temptation situation (1963, p. 492).

Cheating Behavior Among College Students

Burton's (1976) review of the research in the area of honesty included several studies which demonstrated consistency in moral behavior across situations by college students (Hetherington and Feldman, 1964; Heilman, Hodgson, and Horns, 1972). In one study an attempt was made to isolate four types of cheating: individualistic - opportunistic which was characterized as unplanned and impulsive; individualistic-planned characterized as involving an element of foresight and activity preliminary to the test; social-active, characterized as involving two or more persons in which the subject actively engages; and social-passive, characterized as involving

two or more persons in which the subject's participation is passive. The results suggest that different situations tend to elicit specific types of cheating behavior which are at least partially associated with the subject's characteristics (Hetherington and Feldman, 1964, p. 212).

Bonjean and McGee (1965) reported extensive evidence of academic dishonesty among two large southern universities and concluded that the differences in frequency of incidents was more attributable to different forms of social control than to differences in personal backgrounds. Roskens and Dizney (1966) concluded that a simple combination of environmental conditions can not adequately explain the evolution of errant behavior in academia. While place of residence was not statistically related to the extent of personal cheating, it was related to the extent to which respondents were reportedly bothered by cheating. Commuters were found to be bothered by cheating more than any other group (p. 231).

Attempts to study and compare the differences in cheating at different types of institutions of higher education have not resulted in consistent findings (Centra, 1970). In a comparison study using a metropolitan university, Knowlton and Hamerlynck (1967) concluded that in both settings, cheaters perceive more cheating going on than do non-cheaters. Cheaters in both settings were typified as being younger than the non-cheater, a fraternity member, dependent upon others for their financial support, single, a freshman or sophomore, and having lower grades.

In a study conducted of undergraduates enrolled in a Navy ROTC program, Johnson and Gormly (1971) determined that one third of the subjects cheated. Cheaters were not considered to be significantly different from non-cheaters on test scores or grade point averages, but did participate more frequently in clubs and social activities and were more often in leadership positions. Candidates who intended to become officers and for

whom the test was more important were more often cheaters.

Sherrill, Salisbury, Horowitz, and Friedman (1971) reported that 66% of the undergraduate subjects from a large state university were considered to be cheaters. The attitudes of subjects characterized as cheaters were considerably less negative towards cheating. Non-cheaters also reported greater concern about cheating incidents than did cheaters.

A study conducted by Smith, Ryan and Diggins (1972) hypothesized that achievement motivation and indices of conscience such as guilt, moral standards, and potential loss of self-esteem would be negatively related to frequency of cheating while motivation to avoid failure would relate positively. Results indicated that greater willingness to risk detection is related to increased incidents of cheating. They concluded that a violation of a prohibition, such as cheating, is an outcome of a decision making process involving the person and the environment or situation. Behavior in a moral temptation situation is conceived as involving a choice among alternatives to a desired goal. The major situational determinant of cheating was reported to be competition for grades among students (p. 659).

Cheating as an Interactive Function

Research by Karabenick and Snull (1976) indicates that cheating was an interactive function of the personality and situational determinants. Congruence between personality and situational locus of control determinants produced higher rates of cheating than when the determinants were incongruent. Some correlational evidence implicating outcome importance or reward value was found in the relationship between congruence and cheating.

Other research results indicate that cheating behaviors may be related to anticipated success in a curvilinear fashion. That is, subjects anticipating near-certain success may consider cheating unnecessary; while subjects uncertain about their chances may engage in heavy cheating (Houston

and Ziff, 1976; Houston, 1977, 1978).

A study investigating the relationship between parental behaviors, subject personality characteristics, and response to temptation among college students found an anticipated sex difference which led researchers to conclude that males and females in the study may have cheated for different reasons (Kelly and Worell, 1978). Situational determinants such as ease of transgression, perceived surveillance, and reinforcements associated with transgression were all found to influence cheating behaviors.

Cheating and Moral Judgment

Leming's (1978) study attempted to substantiate Kohlberg's claim that higher stages of reasoning provide clearer guides to action. Subject's stage of moral development was assessed using Rest's DIT. Subjects were then presented with a task where they had high incentive to cheat and where it was relatively easy for them to do so (low threat, low supervision) and a situation where there was a high threat of detection and high supervision (high threat, high supervision). Among all subjects and across both situations subjects high in moral development cheated less than other subjects. In the low threat, low supervision situation subjects high in moral development were just as likely to cheat as those subjects low in moral development.

Hays (1980) concluded that there is not a single trait of honesty and that behavior is determined as a result of the person's interaction with the environment. The role that a particular setting plays in promoting consistency between judgment and action was emphasized by Hersh, Paolitto and Reimer (1979). They argued that in some instances the classroom setting calls for a pragmatic, achievement-oriented choice rather than a moral decision. The difference between higher stage people who cheat and those who don't is defined by those asking not "should I cheat?"

but rather "can I get away with it?" Higher stage subjects who define a situation as involving a moral judgment are likely to resist the temptation.

Kohlberg (1970) argued that both justice and the expectations of conventional authority dictate behavior in a cheating situation. In cheating, a critical issue was the recognition of the contractual element and the agreement implicit in the situation. As reported earlier in this chapter, only 11% of the principled college student subjects cheated, while 42% of the lower stage subjects cheated.

Karimi (1977) in a study of the relative effects of threats of punishment, promised rewards, and reasoning on cheating behaviors concluded that the level of moral judgment and cheating behavior could not be used as predictive variables for one another.

Kohlberg (1964) reported that the correlations of conduct with moral judgment seem to be at about the same level as the Hartshorne and May correlations of conduct with moral knowledge (p. 408). He concluded that similar variables such as intelligence, social class, and peer group standing, which favor advance in moral judgment, favor resistance to temptation and moral autonomy. His findings suggested that the influence of social participation groups on moral development affected moral conduct even though it might not be evidenced in immediate reactions to moral situations. The general consistency in moral conduct was to a large extent a result of the maturity factors in decision making.

Summary

The research literature reviewed for this particular study indicates that cheating is a relatively common occurrence among college students, and is a complex behavior which results from the interaction of several factors including specific situational factors, stage of moral development, collective peer attitudes, and personal characteristics.

Commentators on higher education continue to argue that attention must be paid to the seriousness of the offense and its impact on the future of higher education (Brickman, 1974; McBee, 1978; Faia, 1976, Harp and Taietz, 1966; Eddy, 1977; and, Letwin, Browne and See, 1978). The current study was intended to respond to this need and attempted to ascertain additional insights and understandings about the moral development of college students and the extent and scope of academic dishonesty.

Conclusion

This chapter has reviewed the literature and research pertinent to this study on the moral development of college students and the extent and scope of academic dishonesty. The three major areas discussed were theories of college student development, the cognitive developmental approach to moral development, and academic dishonesty. The chapter was designed to provide a context and conceptual framework for the design of the research study which is described in detail in the next chapter.

Chapter Three

Methodology

This study was developed in response to the concern for ethical conduct in higher education expressed by the Carnegie Council (1979). The major questions addressed in this research were: What is the relationship between college students' stage of moral development and their participation in forms of academic dishonesty? What is the relationship between college students' stage of moral development and their attitude toward the seriousness of forms of academic dishonesty? What is the relationship between the college students' participation in academically dishonest behaviors and their attitude toward the seriousness of forms of academic dishonesty?

The investigation was designed to describe the relationships among the following variables: stage of moral development; attitude toward academic dishonesty; participation in forms of academic dishonesty; "reporting behavior"; reasons why students cheat; and the demographic variables of age, gender, place of residence, academic division, class standing, and number of hours spent in employment and extracurricular activities.

This chapter will describe the methodology of the study and is organized to discuss the operational definitions, the sample, research instruments, the pilot studies, data collection procedures, and the scoring and data analysis procedures.

Operational Definitions

For the purpose of this study, the variables utilized are defined accordingly.

1. Stage of moral development refers to the subject's score on the

Defining Issues Test. Two scores will be reported for each subject; a P score, which is interpreted as the relative importance given to principled thinking in making a moral decision, and the exceptional use score which stage-types a subject in terms of use of a particular stage.

2. Attitude towards academic dishonesty refers to the degree to which students consider certain forms of academic dishonesty as serious infractions, ranging on the scale from "not serious at all" to "extremely serious".

3. Participation in academic dishonesty refers to the frequency with which students report they have taken part in forms of academic dishonesty, or they have seen other students participate. Frequency of participation is reported as never; rarely (less than 10% of the time); not often (less than 25% of the time); sometimes (more than 50% of the time); or frequently (too often to count).

4. "Reporting behavior" refers to what students would do when incidents of academic dishonesty are observed in two situations, one which required students to report incidents of academic dishonesty, and one which did not require reporting. Behaviors include: 1) report the student to the appropriate authority; 2) ask the student to report himself/herself; 3) express disapproval but not report the incident; 4) ignore the incident; or, 5) if the incident was considered to be at least somewhat serious, report the student to the appropriate authority.

5. "Reasons why" refers to the explanation students give to explain their own personal participation in forms of academic dishonesty and the participation of other students. Possible explanations include: 1) no one ever gets punished for it; 2) it is necessary in order to avoid failing; 3) my friends all do it; 4) the professors and tests are so unfair, or 5) there are no possible circumstances where it is acceptable to cheat.

6. Seven demographic variables are also identified. Age, sex, and number of hours spent in employment and extracurricular activities are self-explanatory.

Place of residence refers to the following five possible living situations common to college students including: 1) dormitory, 2) fraternity/sorority house; 3) own apartment/house; 4) live with parents; or, 5) other.

Academic division refers to one of the academic divisions in which a student in the sample may be enrolled including: 1) Agricultural and Life Sciences; 2) Arts and Humanities; 3) Behavioral and Social Sciences; 4) Human and Community Resources; 5) Mathematical and Physical Sciences and Engineering; 6) Undergraduate Studies, or, 7) Undecided.

Class standing refers to the official designations used on the campus to describe whether a student is considered 1) a freshman, 2) sophomore, 3) junior, or 4) senior student.

Sample

Students selected to participate in this study were enrolled as undergraduates at a large public university, during fall semester 1980. Names, addresses, and telephone numbers of a stratified random sample of 500 students were obtained to ensure appropriate representation from all class standings, freshman through senior. Sample size was determined by requesting a sample of approximately 2% of the currently enrolled full-time undergraduates (29,835). Of the 500 students selected, 146 students participated in the study.

Research Instruments

Two instruments were used to collect data for this study. One, The Defining Issues Test, was designed and tested by James Rest at the Univer-

sity of Minnesota. The second instrument, The Survey of Academic Dishonesty, was specifically developed for use in this study.

The Defining Issues Test

The Defining Issues Test (DIT, Appendix 1) was used to assess moral judgment. The instrument presents subjects with a moral dilemma and twelve issues related to the dilemma. Subjects are asked to rate and rank the issues in terms of the importance of each consideration in deciding what ought to be done in the situation (Alozie, 1976; Rest, 1979). The advantages of the DIT are its ease of administration, its objective scoring, its standardization, and its minimal dependence on verbal expressiveness.

As discussed in Chapter Two, Rest's position is that "construct validity" is the best approach for determining the degree to which the test scores exhibit the properties implied by the theoretical construct. The research reviewed by Rest (1979) gives support to the claims that moral judgment as measured by the DIT is developmental; that moral judgment scores are governed by underlying general cognitive organizations; and that the DIT is significantly related to people's value stances on public policy issues and is related to experimental and naturalistic measures of behavior (Rest, 1979, pp. 248-250).

Davison summarizes the reliability data from a wide range of studies and reports that the test-retest reliability of the P score in age homogeneous samples was in the .70s (Rest, 1979, p. 244).

The extensive evidence reviewed by Rest (1979) supported the selection of the DIT as an effective measure of moral development for this study.

The Survey of Academic Dishonesty

This survey is based on similar research instruments developed for earlier studies on academic dishonesty (Bowers, 1964; Chapin, 1979; Applebaum, 1980). The instrument was designed to collect information about

how seriously college students consider various forms of academic dishonesty, the level of participation in forms of academic dishonesty, the reasons why students participate in forms of academic dishonesty, and what students do when they observe incidents of dishonesty.

Three different groups of items in the questionnaire were used to calculate subscores to assess the attitudes about the seriousness of forms of dishonesty, the amount of personal participation in dishonesty, and the amount of participation by other students in forms of academic dishonesty.

The face validity of the instrument was determined by a review of other related instruments used to collect data on the topic of academic dishonesty (Bowers, 1964; Chapin, 1979; Applebaum, 1980). Pilot studies conducted during April, June, and July, 1980 were used to establish the reliability of the survey. The results of these pilot studies will be discussed later. Appendix 2 contains the revised version used in the study.

Pilot Studies

In an attempt to refine the research design for this study, two pilot studies were conducted during the Spring and Summer, 1980. The pilots were specifically intended to determine the length of time required to administer the questionnaires and to establish the reliability of the Survey of Academic Dishonesty.

Spring Pilot Study

In April, 1980, both the DIT and the Survey of Academic Dishonesty were administered to 30 undergraduates enrolled in an EDCP class, "Leadership and Group Dynamics."

Instructions given to the group described the research as a pilot study for a dissertation designed to collect information about students'

attitudes toward a variety of social problems with an emphasis on academic dishonesty. Subjects were assured that their participation was completely voluntary and individual responses would be treated confidentially.

Upon review of the data collected in this first administration, it became apparent that several students failed to complete the Survey of Academic Dishonesty. Other students wrote messages such as, "Why are you asking this?" "What difference does it make?", on their survey. It also became apparent from the review of the surveys that 100% of the class were current members of campus fraternities and sororities.

Instead of administering the survey again in several weeks as originally planned, the class time was used to discuss with the group their reactions to the study. The hostile reaction appeared to be related to a recently discovered incident of academic dishonesty involving alteration of university records and grade changes which involved members of a campus fraternity. Subjects were particularly sensitive and defensive about this research study which they considered to be an attempt to "prove the greeks are responsible for cheating on campus".

Summer Pilot Study

In the second pilot study, the Survey of Academic Dishonesty was administered to a group of thirty undergraduate students employed as orientation student advisors for the summer, 1980. While the group was not representative of all undergraduates, it was diverse in terms of race, sex, age, and academic division. The initial administration was conducted on June 13, 1980. The instructions given to the group were similar to those used for the first pilot. Twenty students agreed to participate in a second administration of the Survey during the week of July 14, 1980.

Results of the Pilot Studies

As a result of the Spring pilot, it was determined that the amount

of time needed to complete both instruments ranged from ten to 45 minutes and that the majority of the students completed the instruments within 30 minutes. Students did not have difficulty completing the DIT but encountered several problems in completing the Survey of Academic Dishonesty. Specifically, students were uncertain as to what was meant by "serious"; they were unfamiliar with the abbreviations used to designate the academic division; and they questioned the relevance of their participation in fraternities and sororities. A review of the frequency distribution of the responses to individual items led to the eventual revised Survey used in this study.

The Summer pilot data was analyzed to determine the reliability of the Survey. Using a point bi-serial correlation, 9 of the 14 items in the seriousness and personal participation scales were significantly correlated at the .05 level; of the items relating to how often students had seen other students participate in dishonest activities, 13 of the 14 items were significantly correlated at the .05 level.

Modification of the Survey of Academic Dishonesty

As a result of the pilot studies, several survey items were modified or deleted. The item which asked about affiliation with fraternities and sororities was deleted because the item covering residence provides information about students who live in sorority or fraternity houses. The item on intercollegiate athletics was deleted because it was determined that the number of intercollegiate athletes included in the sample would be insufficient to render statistically significant data. Two other items were also deleted in the final version because similar data was collected in other items.

The responses for two items were rewritten in the final version. The choices "personally report" and "anonymously report" did not attract a

significant number of responses. The responses for items on reasons why students cheat were written to relate to specific stages of moral development. The responses, "no one ever gets punished for it" and "it is necessary in order to avoid failing the class", were intended to represent pre-conventional thinking. Conventional thinking was represented by the responses, "My friends all do it" and "The professors and tests are so unfair", and the final response "there are no possible circumstances where it is acceptable to cheat" was intended to represent post-conventional or principled thinking. Based on Rest's arguments, the responses were reordered so that lower stage choices appeared before higher stage choices (Rest, 1979, p. 92).

Data Collection

On September 28, 1980, 500 students were sent a letter inviting them to participate in the study (Appendix 3). Students were asked to attend one of the 12 administration sessions scheduled for the month of October.

Follow-up telephone calls were made to remind students about the study and to encourage their participation. Eight additional administration sessions were scheduled to accommodate these students (Appendix 4). By November 1, 1980, 146 students had participated in the study. A summary of student responses is contained in Table 2.

During each administration session, the proctor/administrator reviewed with the participants the purpose of the study and the instructions for completing the questionnaires. A copy of the instructions is included in Appendix 5.

Table 2

Summary of Subject Response to the
Invitation to Participate in the Study

Number of letters mailed	500
Number of letters undelivered -- wrong address, etc.	10
Follow-up telephone calls: October 14-28	353
Number of disconnects, not in service, unpublished, wrong numbers, etc.	40
No local or Maryland telephone number listed	14
Number of attempts to contact and left message	55
Number of attempts to contact at least 2 times and received no answer	30
Number of students personally contacted	214
Indicated willingness to participate	198
No longer enrolled	5
Refused to participate	11
Total Number of Students Who Participated	146

Data Scoring and Analysis

The Defining Issues Test

The Defining Issues Test responses were collected on optical scan forms developed by the University of Iowa Evaluation and Examination Service (Whitney, 1978). The Evaluation and Examination Service scored the responses and computed scores for stages 2, 3, 4, 5A, 5B, and 6 as well as A (anti-establishment) and M (meaningless) scores, Rest's P and P-percentage scores and Davison's D score. Group statistics including mean, standard deviation, reliability estimates and frequency distributions for

both P percentage and D scores were also provided.

For the purposes of this study, two scores were used to measure moral judgment, the P-score and the stage score. The P-score represents the sum of weighted ranks given to "principled" items, and is interpreted as the relative importance given to principled moral considerations in making a moral decision (Rest, 1979, p. 101). To calculate the P-score one adds the subtotals from stages 5A, 5B, and 6 together. The P-score is a continuous variable and is considered to be the appropriate score to use when correlating moral judgment with other continuous variables. The P-score is sometimes reported in the literature as a percentage. The P-% is computed by dividing the raw score by 60 (Rest, 1979, p. 91).

The second score used in this study assigns subjects to a particular stage as a way of indicating where the subject is developmentally. In this study subjects are assigned to the stage they use an exceptional amount. Each subject's stage scores are converted to standardized scores and then the subject is assigned to the stage that has a score above +1.0; if two or more stages are high, the highest stage is used; if no stages are high, above +1.0, then the subject is unscorable and cannot be assigned to a stage (Rest, 1979, p. 104). In cases where the subject cannot be "stage-typed", i.e. assigned to a particular stage of exceptional use, it means that the student has not endorsed any stage orientation prevalently. Rest suggests that about 10 to 20% of the sample may be considered non-types. The stage data is considered to be nominal data and is used when considering relationships between moral judgment and other nominal variables.

Prior to the full analysis of the data, the stage data from the DIT was analyzed three different ways to ensure optimum distribution of scores within the cells. The first approach referred to as the "theory block" organized the stage data according to the three theoretical levels; stage 2

in the pre-conventional level; stages 3, 4, and A in the conventional level, and stages 5A, 5B, and 6 into the post-conventional/principled level. The second approach referred to as the "reality block", organized the stage data into three levels around stage 4, considered the modal stage.¹ In this case, level 1, pre-conventional, was composed of stages 2 and 3, level 2, conventional, was composed of stage 4 and A, and level 3, post-conventional, contained stages 5A, 5B, and 6.

The third approach used by Jacobs groups subjects into a "conventional" morality group if their P-% scores were lower than 50% and into a "principled" morality group if their P-% scores were higher than 50% (Rest, 1979, p. 181).

As a result of this preliminary analysis, the P-score was selected as the continuous variable measure of moral development and was used in computing the Pearson correlation coefficients. The stage data used for the chi-square analyses were organized according to the "reality block" approach which optimized the distribution of scores among the cells.

The Survey of Academic Dishonesty

Responses to the Survey of Academic Dishonesty were summarized and reported as frequency distributions. In addition three subscores were constructed from responses to items in the Survey (Babbie, 1973). The "serious score" was used to assess the degree to which students consider academic dishonesty as serious and was computed by adding the responses from items 8-21. The undecided option for items 8-21 was coded as a "0" in the analysis. The "personal participation score" was used to measure the individuals' personal participation in forms of dishonesty and was

¹This approach was suggested by Dr. L. Lee Kniefelkamp, Associate Professor, Counseling and Personnel Services, University of Maryland, College Park, December, 1980.

computed by adding the responses from items 22-35, and the "observed participation score" was used to measure the amount of participation in forms of dishonesty that students observed and was computed from the responses to items 36-49.

Research Hypotheses

The analytical procedures used to test each of the research hypotheses are discussed below. Bivariate techniques available in The Statistical Package for the Social Sciences, (SPSS), (Nie, Hull, Jenkins, Steinbrenner, Bent, 1975) were used to analyze the data.

Hypothesis #1. There is a positive relationship between a college student's stage of moral development and the degree of seriousness with which he/she views academic dishonesty.

Responses to items 8-21 were analyzed as a "serious score". A Pearson correlation coefficient was calculated between the measure of moral development using P-score and the serious score. In addition, chi-square analysis was used to test whether or not a relationship existed between a subject's stage of moral development and responses to the 14 individual items related to seriousness. Results would be considered significant if they reached the .05 level.

Hypothesis #2. There is an inverse relationship between a college student's stage of moral development and his/her participation in forms of academic dishonesty.

The Pearson correlation coefficient was computed between the "personal participation score" composed of items 23-35 and the P-score. In addition, chi-square analysis was used to test whether or not a relationship existed between a subject's stage of moral development and responses to the 14 individual items related to personal participation. Results would be considered significant if they reached the .05 level.

Hypothesis #3. There is an inverse relationship between the degree of seriousness with which college students view academic dishonesty and their participation in forms of academic dishonesty.

The Pearson correlation coefficient was used to consider the relationship between the "serious score" (items 8-21) and the "personal participation score" (items 22-35). Results were considered significant if they reached the .05 level.

Ancillary Issues

The Pearson correlation coefficient and chi-square analysis were used to test whether or not statistical evidence was available to support further consideration of the ancillary issues outlined in Chapter One. Results were considered significant if they reached the .05 level.

Chapter Four

Results

This study focused on the moral development of college students and the scope of academic dishonesty on campus. The major questions addressed in the study were: What is the relationship between college students' stage of moral development and their participation in forms of academic dishonesty? What is the relationship between college students' stage of moral development and their attitude toward the seriousness of forms of academic dishonesty? What is the relationship between college students' participation in academic dishonesty and their attitude toward the seriousness of forms of academic dishonesty. The results of the study are reported in this chapter.

In order to provide a context within which to consider the findings that relate to the research hypotheses, a descriptive summary of the sample will precede the discussion of the research hypotheses. The chapter is organized as follows: data describing the participants in the study, a summary of responses to the Defining Issues Test and the Survey of Academic Dishonesty, findings that relate to the research hypotheses, and evidence relevant to several ancillary issues.

Descriptive Data

One hundred and forty-six undergraduates at a large public university participated in the study. Approximately 56% of the respondents were in their junior and senior years, 49% were male and 51% were female, and the average age of the total group was 21.2 years. Students from each academic division of the university participated in the study. They were distributed as follows: Behavioral and Social Sciences -- 25%, Mathematical

and Physical Sciences and Engineering -- 25%, Arts and Humanities -- 16%, Agricultural and Life Sciences -- 12%, Human and Community Resources -- 7.5%, and others -- 8.2%.

Sixty-one percent of the respondents were commuters living in their own homes or with parents. Only 4 respondents (3%) reported their place of residence as a fraternity or sorority house. Eighty-nine percent of the participants spent up to 7 hours a week in extracurricular activities and 68% were employed up to 15 hours per week. Tables 20 through 26 in Appendix 6 summarize the demographic characteristics of the sample in detail.

Based on official university statistics, this sample approximates the characteristics of the overall population. Of the 25,100 full-time undergraduates enrolled for fall 1980, 53% were male and 45% were upper-class students and approximately 63% of the students commuted to campus. Twelve percent enrolled in Agricultural and Life Sciences, 13% in Arts and Humanities, 30% in Behavioral and Social Sciences, 13% in Human and Community Resources, and 20% in Mathematical and Physical Sciences and Engineering (Office of Institutional Studies, October, 1980 and January, 1981).

Results of The Defining Issues Test

As discussed in Chapter Three (see p. 57) two different scores were used to represent moral judgment in this study. They were the P-score (relative importance given to principled thinking) and a score indicating the subject's stage of moral development (exceptional use stage score).

Twenty-eight of the 146 protocols were discarded because of questionable data including too many stories with rank/rating inconsistencies, too many rank/rating inconsistencies within a story, or too many meaningless items given great importance. Therefore, P-scores were computed for

only 118 subjects. Of the 118 useable protocols it was possible to assign only 90 subjects to a stage. This means that 28 (24%) of the subjects have not endorsed a prevalent stage. These mortality rates are somewhat higher than Rest's estimates. He indicated that approximately 2-15% of the questionnaires are lost because of the M-score and consistency check and that between 10-20% of sample would be "non-types" (Rest, 1979). In a study using graduate students enrolled in a department of counseling and personnel services, Wertheimer (1980) reported that 18% of the protocols were not useable for similar reasons and that it was not possible to stage-type 9% of her subjects. The differences in the inability to stage-type subjects, 24% in this study and 9% in Wertheimer's study, may indicate that graduate students are more likely to have endorsed a prevalent stage orientation than are undergraduates.

The average P-score for the 118 subjects was 24.4 with a standard deviation of .81. The mean P-% score (see p. 57) was 42.34 with a standard deviation of 14.59. This compares favorably with the results of a composite sample of college students ($N = 2,479$) in which the mean P-% score was 41.6 with a standard deviation of 13.2 (Rest, 1979, p. 114). Stage 4 was the predominant stage for the respondents. Seven subjects were assigned to stage 2 at the preconventional level; 46 subjects were at the conventional level or stage 3, 4 or A, and 37 subjects were operating at the post-conventional/principled level or stage 5A, 5B or 6. Table 3 summarizes the stage scores for the participants according to both the theoretical block and the reality block which were discussed in Chapter Three (see p. 58). Figures 1 and 2 illustrate the sample distribution among the stages.

Table 3

Sample Distribution By Stage of Moral Development Comparison
between "Theory Block" and "Reality Block"

N = 90

Theory Block			Reality Block		
Preconventional Level 1					
<u>Stage</u>	<u>N</u>	<u>%</u>	<u>Stage</u>	<u>N</u>	<u>%</u>
2	7	8	2	7	8
			3	14	15
Conventional Level 2					
<u>Stage</u>	<u>N</u>	<u>%</u>	<u>Stage</u>	<u>N</u>	<u>%</u>
3	14	15	4	26	29
4	26	29	"A"	6	7
"A"	6	7			
Post-conventional Level 3					
<u>Stage</u>	<u>N</u>	<u>%</u>	<u>Stage</u>	<u>N</u>	<u>%</u>
5A	20	22	5A	20	22
5B	6	7	5B	6	7
6	11	12	6	11	12
Total	90	100		90	100

The subjects in this study were primarily conventional thinkers. That is, they tended to view moral dilemmas or conflict situations, as requiring the maintenance of societal expectations. Their attitude was one of conformity to personal expectations and social order. They tended to follow

the rules for the social good and in order to avoid chaos.

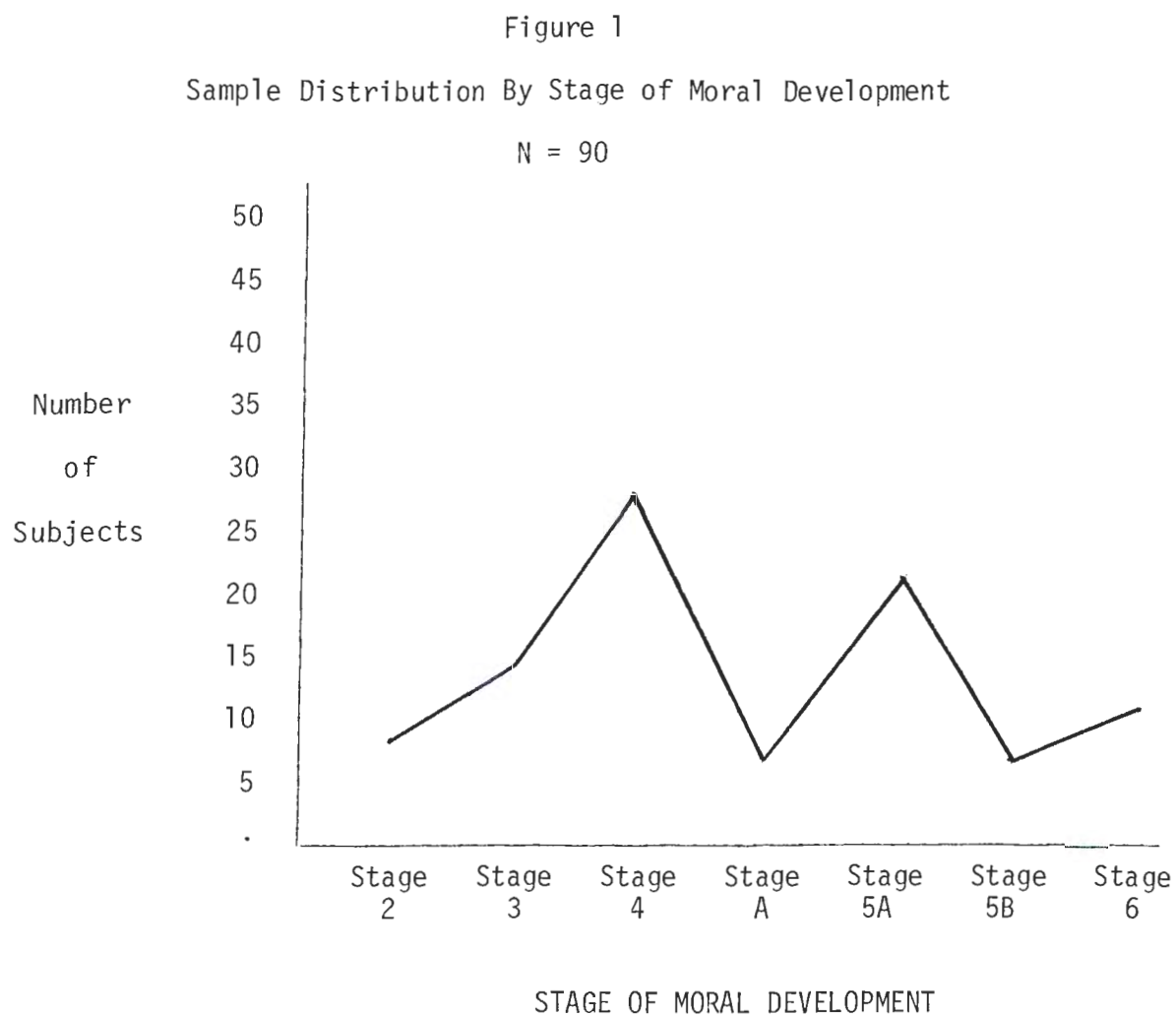
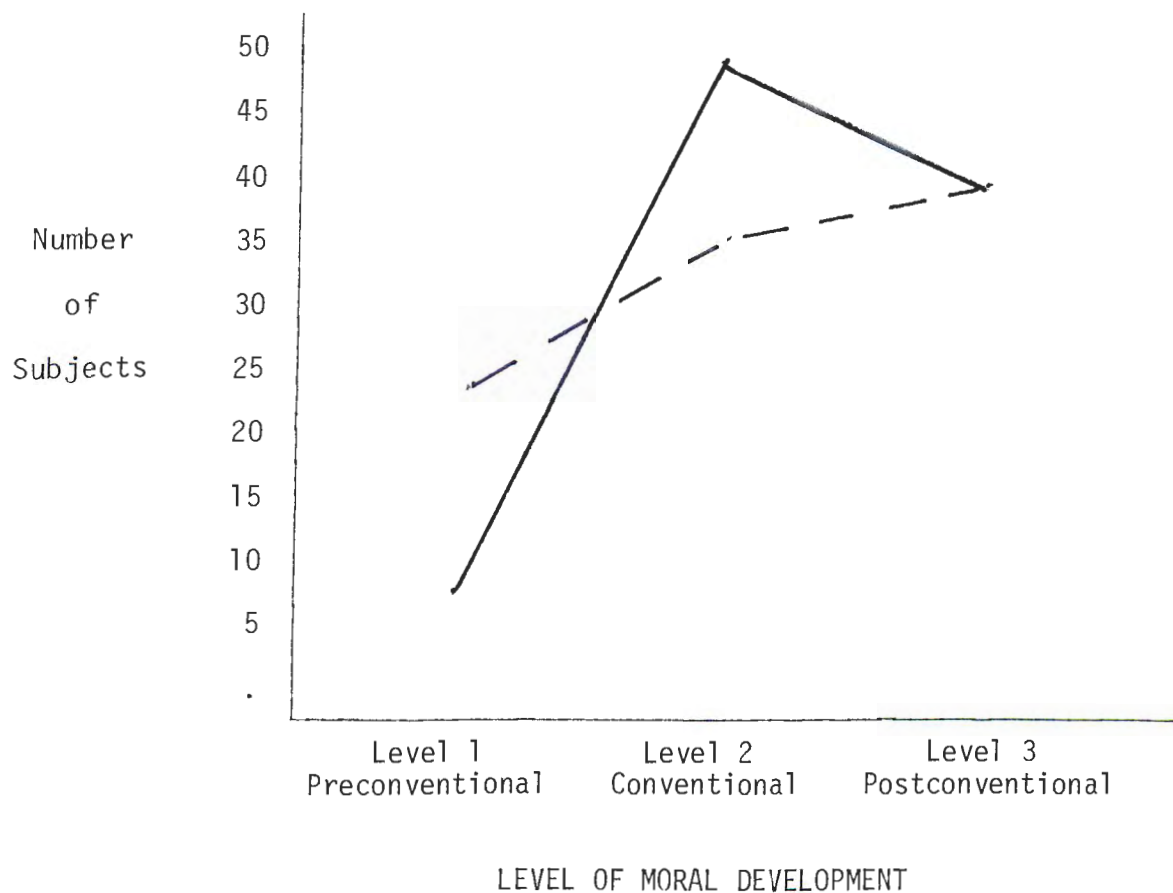


Figure 2

Comparison Between Subjects Grouped By
"Reality Block" vs "Theory Block"

N = 90



Key: _____ Theory Block: Level 1 = Stage 2; Level 2 = Stage 3, 4, A;
 Level 3 = Stage 5A, 5B, 6
 - - - - - Reality Block: Level 1 = Stage 2 & 3; Level 2 = Stage 4, A;
 Level 3 = Stage 5A, 5B, 6

Survey of Academic Dishonesty

The Survey of Academic Dishonesty was designed to collect information about how seriously college students consider various forms of academic dishonesty, the level of participation by college students in forms of academic dishonesty, what students do when they observe incidents of dishonesty, and the reasons why students participate in forms of dishonesty. The responses to the Survey of Academic Dishonesty are reported in this section.

Attitudes Toward Academic Dishonesty

The respondents' attitudes toward academic dishonesty were assessed by asking them to report the degree to which they considered each of the fourteen forms of academic dishonesty as serious (see p. 5). The responses to the fourteen items were added together to compute the total score for the attitude toward academic dishonesty. This score is referred to as the "serious score" and its value ranged from 14 (not serious at all) to 56 (extremely serious).

Respondents considered each of the fourteen different forms of academic dishonesty to be somewhat or moderately serious. The mean "serious score" was 46.51 and the standard deviation was 5.9. Table 4 summarizes the means and standard deviations of the responses to "how serious do you consider the following activities to be" and indicates the rank order of the 14 forms of academic dishonesty from most serious to least serious.

Table 4
College Students' Attitude About The Seriousness
of Academic Dishonesty^a
N = 145

Behavior	Rank	\bar{X}	SD
Taking an exam for another student.	1	3.92	.42
Having another student take an exam for you.	1	3.92	.42
Altering or forging an official university document.	3	3.78	.74
Paying someone to write a paper for you to submit as your own.	4	3.76	.62
Arranging with other students to give or receive answers by use of signals.	5	3.72	.69
Arranging to sit next to someone who will let you copy from his/her exam.	6	3.70	.61
Copying from someone's exam paper without his/her knowledge.	7	3.69	.67
Writing a paper for another student.	8	3.63	.78
Allowing another student to copy from you during an exam.	9	3.37	.82
Copying answers from a source without doing work independently.	10	3.11	.89
Getting questions or answers from someone who has already taken the same exam.	11	3.10	.98
Copying a few sentences without footnoting in a paper.	12	2.38	1.0
Working on homework with other students when the instructor doesn't allow it.	13	2.23	.90
"Padding" a few items on a bibliography.	14	2.15	.95

^aThis item was based on responses to the question "how serious do you consider the following activities to be?" with 1 = Not Serious at All and 4 = Extremely Serious.

Taking an exam for another student and having another student take an exam for you were considered to be the most serious forms of dishonesty. "Padding" a few items on a bibliography and working on homework with other students when it is not allowed were considered to be the least serious. The respondents consider the more active forms of dishonesty such as, arranging to give or receive signals and arranging to sit next to someone who will let them copy during an exam, as more serious than copying from someone's exam without their knowledge or simply allowing another to copy during an exam. The respondents also considered behaviors related to the examination situation to be more serious than forms of dishonesty related to out of class activities such as the preparation of term papers and homework assignments. For example, taking an exam for another or having someone take an exam for you were considered to be more serious than either paying someone to write a paper to submit as your own or writing a paper for another student. Four of the five most serious forms of dishonesty related to examinations; four of the five least serious forms of dishonesty related to term papers or homework, and, all five of the least serious behaviors could be considered as out-of-class activities.

Participation in Academic Dishonesty

The respondents in this study were asked to report the frequency of their own personal participation in the 14 forms of dishonesty and were also asked to report how frequently they had seen other students participate in the same forms of dishonesty. The responses to the items related to personal participation were added together to compute a subscore, hereafter referred to as the "personal participation score". Responses to items relating to the participation by others were added together to compute the subscore, hereafter referred to as the "observed participation score". The values of these two participation subscores range from 14 (never) to

60 (frequently).

Personal Participation. In general respondents characterized the frequency of their own participation in the 14 forms of academic dishonesty as occurring either never or rarely (less than 10% of the time). The mean of the "personal participation score" was 20.08 and the standard deviation was 3.98. Table 5 summarizes the mean scores and standard deviations for personal participation for each of the 14 forms of dishonesty.

Insert Table 5 here

"Copying a few sentences without footnoting in a paper" and "working on homework with other students when it is not allowed" were the behaviors most frequently reported by the respondents.

While the respondents did not report frequent participation in the 14 forms of dishonesty, the amount of dishonesty on campus should not be minimized. Seventy-nine percent of the subjects acknowledged some personal participation in at least one dishonest behavior. Cheating during examinations is relatively common. Two percent said they had taken an exam for another student; 3% said they had had another student take an exam for them; and 10% of the subjects reported arranging with other students to give or receive answers by use of signals; 19% acknowledged arranging to sit next to someone who will let them copy from their exam; 39% acknowledged copying from someone's exam paper without their knowledge; 49% acknowledged allowing another student to copy from you during an exam; 58% of the subjects said they had obtained questions or answers from someone who has already taken the same exam.

The respondents reported more frequent participation in what they considered to be the least serious forms of dishonesty. For example, the

Table 5

Rank Order Frequency, Means, and Standard Deviations of College Students' Participation in Forms of Academic Dishonesty

N = 145

Behavior	Personal Participation ^a			Observed Participation ^b		
	Rank	\bar{X}	SD	Rank	\bar{X}	SD
Copying a few sentences without footnoting in a paper	1	2.10	.79	6	2.63	1.26
Working on homework with other students when the instructor doesn't allow it	2	1.99	.89	3	2.82	1.23
Copying answers from a source without doing work independently	3	1.85	.73	4	2.8	1.15
Getting questions or answers from someone who has already taken the same exam	4	1.82	.88	1	3.3	1.22
"Padding" a few items on a bibliography	5	1.8	.75	8	2.37	1.13
Allowing another student to copy from you during an exam	6	1.64	.78	7	2.58	1.22
Copying from someone's exam paper without his/her knowledge	7	1.43	.59	2	3.08	1.27
Arranging to sit next to someone who will let you copy from his/her exam	8	1.22	.51	5	2.68	1.24
Arranging with other students to give or receive answers by use of signals	9	1.11	.36	9	1.99	1.04
Writing a paper for another student	10	1.07	.35	10	1.97	.96
Altering or forging an official university document	11	1.03	.18	14	1.30	.62
Having another student take an exam for you	12	1.02	.14	13	1.39	.68
Taking an exam for another student	13	1.01	.12	12	1.42	.72
Paying someone to write a paper to submit as your own work	13	1.01	.08	11	1.66	.81

^aThis item is based on responses to "how often have you taken part in the following activities" with 1 = Never and 5 = Frequently (Too often to count).

^bThis item is based on responses to "how often you have seen other students take part in the following activities" with 1 = Never and 5 = Frequently (Too often to count).

five most frequently reported behaviors for personal participation were also considered as the five least serious behaviors. Of the five most serious behaviors, four are among the ones respondents reported the least frequent personal participation. Arranging with others to give or receive signals during an exam is one exception. Students consider it to be among the five most serious behaviors and it ranks in the middle range of personal participation.

Observed Participation. The respondents indicated that they had seen other students take part more frequently in forms of dishonesty than they themselves had participated. The mean of the "observed participation score" was 32.13 and the standard deviation was 10. Getting questions and answers from someone who has already taken the exam and copying from someone's exam paper without their knowledge were the most frequently observed behaviors. Table 5 summarizes the mean scores and standard deviation for observed participation in each of the 14 forms of dishonesty.

Subject's also reported having seen other students take part in behaviors which were considered to be somewhat more serious. Of the five most frequently observed behaviors, two were among those considered to be somewhat serious. They were: copying from someone's exam paper without their knowledge and arranging to sit next to someone who will let you copy from his/her exam. Rank order comparisons for attitude, personal participation, and observed participation are outlined in Table 6. This illustrates that students in general do not participate frequently in the forms of dishonesty which they consider to be most serious.

Insert Table 6 here

Table 6

Rank Order Comparison of College Students' Attitudes About the Seriousness of Academic Dishonesty
Compared to Personal and Observed Participation

N = 145

Behavior	Ranking		
	Attitude Seriousness ^a	Personal Participation ^b	Observed Participation ^c
Taking an exam for another student	1	13	12
Having another student take an exam for you	1	12	13
Altering or forging an official university document	3	11	14
Paying someone to write a paper to submit as your own work	4	13	11
Arranging with other students to give or receive answers by use of signals	5	9	9
Arranging to sit next to someone who will let you copy from his/her exam	6	8	5
Copying from someone's exam paper without his/her knowledge	7	7	2
Writing a paper for another student	8	10	10
Allowing another student to copy from you during an exam	9	6	7
Copying answers from a source without doing work independ- ently	10	3	4
Getting questions or answers from someone who has already taken the same exam	11	4	1
Copying a few sentences without footnoting in a paper	12	1	6
Working on homework with other students when the instructor doesn't allow it	13	2	3
"Padding" a few items on a bibliography	14	5	8

^aThis item is based on responses to the question "how serious do you consider the following activities to be".

^bThis item is based on responses to the question "how often have you taken part in the following activities".

^cThis item is based on responses to the question "how often have you seen other students take part in the following activities".

Reporting Behavior

Forty-three percent of the respondents indicated that they would ignore an observed cheating incident, 3% would report the incident, and 28% said they would report the students to the appropriate authorities if they considered the incident to be at least somewhat serious. If University regulations required students to report others who cheat, 15% of the students would report the incident, 28% would ignore the incident and 28% would report the incident if they considered it to be somewhat serious.

According to the findings reported earlier it appears that only 28% of the students are likely to report the following forms of dishonesty: taking an exam for another student; having another student take an exam for you, altering or forging an official University document; paying someone to write a paper, and arranging with other students to give or receive answers by use of signals. Table 7 summarizes the reporting behaviors of college students observing incidents of cheating.

Table 7
Reporting Behaviors of College Students Observing
Incidents of Academic Dishonesty
N = 145

	Suppose you saw a student cheating. What would you do?		If University regulations required students to report others who cheat, how would you answer the last question?	
	N	%	N	%
Report the student(s) to the instructor, proctor or appropriate authority	5	3.4	22	15.3
Ask the student to report him/herself/ themselves	2	1.4	16	11.1
Express disapproval but not report the student(s)	36	24.8	24	16.7
Ignore the incident	62	42.8	41	28.5
If I considered the incident to be at least somewhat serious, I would report the student(s)	40	27.6	41	28.5
Missing responses	1		2	

Reasons Why Students Cheat

In the opinion of the respondents, students are most likely to cheat in order to avoid failing a class (45%). Twenty one percent reported cheating occurred because no one ever gets punished for it. Only 17% of the respondents indicated that there were no possible circumstances where it is acceptable for students to cheat.

When asked why the respondents personally cheat, 48% indicated that they would be most likely to cheat in order to avoid failing the class and 36% responded that there are no possible circumstances where it would be acceptable to cheat. The responses to the items related to the reasons why students cheat are summarized in Table 8.

Table 8
Reasons Why College Students Cheat
N = 145

	In your opinion, the reason stu- dents are most likely to cheat is:		The reason I would be most likely to cheat is:	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
No one ever gets punished for it	30	21.3	10	7.0
It is necessary in order to avoid failing the class	64	45.4	69	48.3
Their/my friends all do it	15	10.6	0	
The professors and tests are so unfair	8	5.7	12	8.4
There are no possible circumstances where it is acceptable to cheat	24	17.0	52	36.4
Missing responses	5		3	

Test of Research Hypotheses

Three research hypotheses were tested in this study. The results of the data analyses performed to test the hypotheses are discussed in this section.

Hypothesis 1

There is a positive relationship between college students' stage of moral development and the degree of seriousness with which they view academic dishonesty.

A Pearson Product Moment Correlation Coefficient was performed to test the relationship between moral development and the degree of seriousness. The P-score was used as the continuous measure of moral development and the "serious score" was the measure of seriousness. The results of the analysis show a slight positive relationship between the two variables ($r = .22$ $p < .05$) and the hypothesis is therefore accepted.

The results of the Chi-square analyses between stage of moral development and the 14 individual items related to seriousness were not significant beyond the .05 level. Table 9 summarizes the results.

Insert Table 9 here

Hypothesis 2

There is an inverse relationship between a college student's stage of moral development and his/her participation in forms of academic dishonesty.

A Pearson Product Moment Correlation Coefficient was performed to test the relationship between the variables of moral development and personal participation in academic dishonesty. The P-score was used as the continuous measure of moral development and the "personal participation score" measured personal participation. The result was a small and non-significant negative correlation ($r = -.11$ $p > .05$). This finding fails to support the hypothesis and it is rejected.

Table 9

Summary of Chi-Square Analyses Between College Students'
Stage of Moral Development and Their Attitude About the
Seriousness of Certain Forms of Academic Dishonesty¹

<u>Item</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>	<u>N</u>
Padding a few items on a bibliography.	9.2	6	.16	87
Copying a few sentences without footnoting in a paper.	3.9	6	.69	88
Copying answers from a source without doing work independently.	7.6	6	.27	87
Writing a paper for another student.	2.1	6	.91	88
Paying someone to write a paper to submit as your own work.	6.9	4	.14	88
Getting questions or answers from someone who has already taken the same exam.	6.6	6	.36	89
Arranging with other students to give or receive answers by use of signals.	9.7	6	.14	89
Copying from someone's exam paper without his knowledge.	1.8	4	.78	88
Arranging to sit next to someone who will let you copy from his/her exam.	8.7	6	.19	88
Allowing another student to copy from you during an exam.	6.8	6	.34	88
Taking an exam for another student.	2.5	4	.65	89
Having another student take an exam for you.	6.4	4	.17	89
Working on homework with other students when the instructor does not allow it.	8.0	6	.24	89
Altering or forging an official University document.	4.8	6	.56	88

¹None were significant >.05 level.

The results of the Chi-square analyses between stage of moral development and the 14 individual items related to personal participation were not significant beyond the .05 level. Table 10 summarizes the results.

Table 10

Summary of Chi-Square Analyses Between College Students' Stage of Moral Development and Their Personal Participation in Certain Forms of Academic Dishonesty¹

<u>Behavior</u>	<u>χ^2</u>	<u>df</u>	<u>p</u>	<u>N</u>
Padding a few items on a bibliography.	3.6	6	.73	88
Copying a few sentences without footnoting in a paper.	2.1	6	.91	89
Copying answers from a source without doing work independently.	5.5	6	.48	89
Writing a paper for another student.	4.2	6	.65	89
Paying someone to write a paper to submit as your own work.	unable to compute			89
Getting questions or answers from someone who has already taken the same exam.	10.9	6	.09	89
Arranging with other students to give or receive answers by use of signals.	2.8	4	.60	89
Copying from someone's exam paper without his/her knowledge.	4.5	6	.61	89
Arranging to sit next to someone who will let you copy from his/her exam.	8.5	6	.20	89
Allowing another student to copy from you during an exam.	4.0	6	.67	89
Taking an exam for another student.	.64	2	.73	89
Having another student take an exam for you.	1.8	2	.41	89
Working on homework with other students when the instructor does not allow it.	7.6	6	.27	88
Altering or forging an official University document.	.64	2	.73	89

¹None were significant > .05 level.

Hypothesis 3

There is an inverse relationship between the degree of seriousness with which college students view academic dishonesty and their participation in forms of academic dishonesty.

A Pearson Product Moment Correlation Coefficient was performed to test the relationship between the continuous variables of attitude about the seriousness of academic dishonesty and personal participation. The correlation coefficient between the "serious score" and the "personal participation score" was $r = -.47$ and was significant at the .001 level. The hypothesis is therefore accepted. Because this hypothesis did not consider relationships between individual items, no chi-square analyses were performed.

Ancillary Issues

Several ancillary issues were explored for which no research hypotheses were offered. These issues considered the relationships between the demographic variables and other variables related to academic dishonesty. The findings related to these issues are discussed below.

Age

A Pearson Product Moment Correlation Coefficient was performed to test the relationship between the continuous variable age and other continuous variables, including moral development ($r = .26$ $p < .05$); attitude about the seriousness of academic dishonesty ($r = .15$ $p < .05$); personal participation ($r = -.24$ $p < .05$); and observed participation ($r = -.22$ $p < .05$). These findings indicate that there is a slight positive relationship between age and both moral development and attitude toward the seriousness of academic dishonesty. The findings also show a significant inverse relationship between age and personal and observed participation. Table 11 summarizes these results.

Table 11

Correlations between Age and Selected Academic Dishonesty Variables

		Moral Development	Attitude/ Seriousness	Personal Participation	Observed Participation
Age	<u>r</u>	.26	.15	-.24	-.22
	<u>N</u>	117	142	142	141
	<u>p</u>	.003	.037	.002	.004

Sex

Chi-square analyses were performed to test the relationship between the nominal variable sex and other relevant variables including stage of moral development ($\chi^2 = .81$ df = 2 p = .67); reporting behavior in a non honor code situation ($\chi^2 = 9.30$ df = 4 p < .05); reporting behavior in an honor code situation ($\chi^2 = 15.13$ df = 4 p < .05); reasons why students cheat ($\chi^2 = 5.19$ df = 4 p = .27); and reasons why I personally cheat ($\chi^2 = 4.08$ df = 3 p = .25). The results indicate that there is a significant relationship between sex and reporting behaviors. Table 12 illustrates the distribution of the sample by sex and their responses to the items related to reporting behavior.

Insert Table 12 here

Place of Residence

Chi-square analyses were performed to test the relationship between the nominal variable place of residence and other relevant variables including stage of moral development ($\chi^2 = 14.95$ df = 8 p = .06); reporting behavior in a non honor code situation ($\chi^2 = 27.16$ df = 16 p = .04); reporting behavior in an honor code situation ($\chi^2 = 25.53$ df = 16 p = .08); reasons why students cheat ($\chi^2 = 24.45$ df = 16 p = .08); and reasons why I personally cheat ($\chi^2 = 6.24$ df = 12 p = .90). The results indicated

Table 12

The Reporting Behavior of College Students Observing
Incidents of Cheating By Sex

		Reporting Behavior									
		Report Student		Ask Student to Report Self		Express Disapproval		Ignore		Report if Considered Somewhat Serious	
		N	%	N	%	N	%	N	%	N	%

Suppose you saw a student cheating.
What would you do?

Men	1	20	2	100	22	61.1	32	52.5	14	35
Women	4	80	0	0	14	38.9	29	27.5	26	65
Total	5	100	2	100	26	100	61	100	40	100

$$\chi^2 = 9.30; \quad df = 4; \quad p < .05 \quad N = 144$$

If university regulations required you to report others who cheat, how would you answer the last question?

Men	8	36.4	7	43.8	17	70.8	26	65	13	31.7
Women	14	63.6	9	56.3	7	29.2	14	35	28	68.3
Total	22	100	16	100	24	100	40	100	41	100

$$\chi^2 = 15.13; \quad df = 4; \quad p < .05; \quad N = 143$$

that a significant relationship existed between place of residence and what a student would do if they observed someone cheating. Table 13 summarizes these results.

Table 13

The Reporting Behavior of College Students Observing
Incidents of Cheating By Place of Residence

	Reporting Behavior									
	Report Student		Ask Student to Report Self		Express Disapproval		Ignore		Report if Considered Somewhat Serious	
	N	%	N	%	N	%	N	%	N	%
Dorm	4	80	0		15	41.7	19	30.6	11	27.5
Fraternity	0		0		0		2	3.2	2	5.0
Own Apartment	0		2	100	8	22.2	17	27.4	10	25.0
Parents	0		0		13	36.1	24	38.7	15	37.5
Other	1	20	0		0		0		2	5.0
Total	5	100	2	100	36	100	62	100	40	100

$$\chi^2 = 27.16; \text{ df} = 16; \text{ p} < .05; \text{ N} = 145$$

Because the results of the chi-square analysis between place of residence and several of the other variables approached the acceptable level of significance, a post hoc analysis was performed. In this analysis the original five categories of the variable place of residence were reorganized into two categories; on campus which included dormitory, fraternity/sorority and other and off-campus which included own apartment/house and live with parents. The results of the chi-square analysis using the revised grouping for place of residence and the other relevant variables were as follows: stage of moral development: ($\chi^2 = 11.47$ df = 2 p = .003);

reporting behavior in a non honor code situation ($\chi^2 = 9.96$ $df = 4$ $p = .04$); reporting in an honor code situation ($\chi^2 = 10.11$ $df = 4$ $p = .04$); reasons why students cheat ($\chi^2 = 1.17$ $df = 4$ $p = .88$); and reasons why I personally cheat ($\chi^2 = 3.07$ $df = 3$ $p = .38$). The findings demonstrate a significant relationship between whether a student lives on or off campus and their stage of moral development and what they would do if they observed someone cheating. Tables 14 and 15 illustrate the significant results.

Table 14

Sample Distribution By Stage of Moral Development
and Residence

	Place of Residence			
	On-campus		Off-campus	
	N	%	N	%
Preconventional Level 1	8	22.2	13	24.5
Conventional Level 2	20	55.6	12	22.6
Postconventional Level 3	8	22.2	28	52.8
Total	36	100	53	100

$\chi^2 = 11.47$; $df = 2$; $p = .003$; $N = 89$

Table 15

The Reporting Behaviors of College Students Observing
Incidents of Cheating By Place of Residence

		Reporting Behaviors									
		Report Student		Ask Student to Report Self		Express Disapproval		Ignore		Report if Somewhat Serious	
		N	%	N	%	N	%	N	%	N	%
Suppose you saw a student cheating. What would do you?											
On Campus		5	100	0	0	15	41.7	21	33.9	15	37.5
Off Campus		0	0	2	100	21	58.3	41	66.1	25	62.5
Total		5	100	2	100	36	100	62	100	40	100

$$\chi^2 = 9.96; \text{ df} = 4; \text{ p} = .04; \text{ N} = 145$$

If university regulations required you to report others who cheat, how would you answer the last question?

On Campus		12	54.5	10	62.5	10	41.7	10	24.4	14	34.1
Off Campus		10	45.5	6	37.5	14	58.3	31	75.6	27	65.9
Total		22	100	16	100	24	100	41	100	41	100

$$\chi^2 = 10.11; \text{ df} = 4; \text{ p} = .04; \text{ N} = 144$$

Academic Division

Chi-square analyses were performed to test the relationship between the nominal variable academic division and other relevant variables including stage of moral development ($\chi^2 = 28.77$ df = 12 p = .004); reporting behavior in a non honor code situation ($\chi^2 = 24.08$ df = 24 p = .46); reporting behavior in an honor code situation ($\chi^2 = 14.81$ df = 24 p = .93); reasons why students cheat ($\chi^2 = 30.40$ df = 24 p = .17); and reasons why I personally cheat ($\chi^2 = 11.03$ df = 18 p = .89). The only significant relationship was between academic division and stage of moral development. Table 16 illustrates the sample distribution by stage of moral development and academic division.

Table 16

Sample Distribution by Academic Division and
Stage of Moral Development

	<u>Academic Division</u>											
	AGLS		A & H		BSOS		H & CR		MPSE		OTHER	
	N	%	N	%	N	%	N	%	N	%	N	%
Preconventional	0	0	4	22.2	6	31.6	0	0	6	24	5	50
Conventional	6	66.7	9	50.0	1	5.3	4	50	8	32	4	40
Postconventional	3	33.3	5	27.8	12	63.2	4	50	11	44	1	10
Total	9	100	18	100	19	100	8	100	25	100	10	100

$\chi^2 = 28.77$; df = 12; p < .05; N = 89

Class Standing

Chi-square analyses were performed to test the relationship between class standing and other relevant variables including stage of moral development ($\chi^2 = 11.65$ df = 8 p = .17); reporting behavior in a non honor code situation ($\chi^2 = 11.98$ df = 16 p = .74); reporting behavior in an

honor code situation ($\chi^2 = 7.46$ df = 16 p = .96); reasons why students cheat ($\chi^2 = 13.10$ df = 16 p = .67); and reasons why I personally cheat ($\chi^2 = 10.88$ df = 12 p = .54). The results of these analyses were not statistically significant and it is therefore concluded that these variables are independent.

Number of Hours Spent in Extracurricular Activities

Chi-square analyses were performed to test the relationship between the nominal variable of amount of time spent in extracurricular activities and other relevant variables including stage of moral development ($\chi^2 = 6.22$ df = 8 p = .62); reporting behavior in a non honor code situation ($\chi^2 = 17.07$ df = 16 p = .38); reporting behavior in an honor code situation ($\chi^2 = 14.66$ df = 16 p = .55); reasons why students cheat ($\chi^2 = 20.06$ df = 16 p = .22); and reasons why I personally cheat ($\chi^2 = 4.87$ df = 12 p = .96). The findings were not statistically significant and it is therefore concluded that the variables are independent.

Number of Hours Spent in Part-Time Employment

Chi-square analyses were performed to test the relationship between the nominal variable of amount of time spent in employment and other relevant variables including stage of moral development ($\chi^2 = 3.46$ df = 8 p = .90); reporting behavior in a non honor code situation ($\chi^2 = 26.56$ df = 16 p = .05); reporting behavior in an honor code situation ($\chi^2 = 9.88$ df = 16 p = .87); reasons why students cheat ($\chi^2 = 30.61$ df = 16 p = .02); and reasons why I personally cheat ($\chi^2 = 19.8$ df = 12 p = .07). The findings indicate that a statistically significant relationship existed between the amount of time spent in employment and what a college student would do if they saw someone cheating and the reasons why students cheat.

Tables 17 and 18 summarize these results.

Table 17

The Reporting Behavior of College Students Observing
Incidents of Cheating By Number of Hours Spent in Employment

	Reporting Behavior									
	Report Student		Ask Student to Report Self		Express Disapproval		Ignore		Report if Somewhat Serious	
	N	%	N	%	N	%	N	%	N	%
0-4 hrs/week	1	20	1	50	17	47.2	25	40.3	20	50
5-10 hrs/week	1	20	0		4	11.1	7	11.3	5	12.5
11-15 hrs/week	0		0		6	16.7	9	14.5	3	7.5
>15 < full time	1	20	0		8	22.2	20	32.3	9	22.5
full time	2	40	1	50	1	2.8	1	1.6	3	7.5
Total	5	100	2	100	36	100	62	100	40	100

$$\chi^2 = 26.56; \quad df = 15; \quad p < .05; \quad N = 145$$

Table 18

Reasons Why College Students Cheat By Number of Hours Spent in Employment

	Reasons Why Students Cheat									
	No one Punished		Avoid Failure		Friends Do It		Prof./Tests Are Unfair		No Acceptable Circumstances	
	N	%	N	%	N	%	N	%	N	%
0-4 hrs/week	12	40	32	50	5	33.3	5	62.5	8	33.3
5-10 hrs/week	6	20	6	9.4	0		0		5	20.8
11-15 hrs/week	2	6.7	6	9.4	0		1	12.5	8	33.3
>15 < full time	8	26.7	16	25	9	60	2	25	2	8.3
full time	2	6.7	4	6.3	1	6.7	0		1	4.2
Total	30	100	64	100	15	100	8	100	24	100

$$\chi^2 = 30.61; \quad df = 16; \quad p = .02; \quad N = 141$$

Table 19 summarizes the results of statistical tests performed to consider the ancillary issues involving the demographic variables and other variables related to academic dishonesty.

Insert Table 19 here

The final ancillary issues considered were the relationship between stage of moral development and reasons why students cheat and their reporting behaviors. Chi-square analyses were performed between moral development and the reasons why students cheat ($\chi^2 = 13.4$ $df = 8$ $p > .05$); reasons why I personally cheat ($\chi^2 = 4.67$ $df = 8$ $p > .05$); reporting behavior in a non honor code situation ($\chi^2 = 4.04$ $df = 8$ $p > .05$); and reporting behavior in an honor code situation ($\chi^2 = 7.3$ $df = 8$ $p > .05$). The findings were not statistically significant and it is therefore concluded that the variables are independent.

Summary

This chapter has discussed the sample's responses to the Defining Issues Test and the Survey of Academic Dishonesty, the tests of the research hypotheses, and presented the evidence relevant to several of the ancillary issues.

The results of the DIT indicate that the subjects are operating primarily at the conventional levels of moral development and as such their thinking may best be characterized as conforming to rules for the social good.

The subjects consider forms of dishonesty to be somewhat or moderately serious, and they consider forms of dishonesty related to examinations to be more serious than those forms related to out of class activities.

The results of the study support the conclusion that incidents of

Table 19

Summary of Relationships between Demographic Variables and Other Variables Related to Academic Dishonesty

Demographic Variable	Moral Development	Attitude/ Serious	Personal Participation	Observed Participation	<u>Reporting Behavior</u>		<u>Reasons Why</u>	
					Suppose you saw a student cheat- ing. What would you do?	University regu- lations required reporting cheat- ing, how would you answer the last question?	Reasons Students Cheat	Reason I would Cheat
Age ^a	.26*	.15*	-.24*	-.22*				
Sex	.81				9.30*	15.13*	5.19	4.08
Residence	14.95				27.16*	25.53	24.45	6.24
Residence (post hoc)	11.47*				9.96*	10.11*	1.17	3.07
Academic Division	28.77*				24.08	14.81	30.40	11.03
Class Standing	11.65				11.98	7.46	13.10	10.88
No. of Hours Spent in extracurricular activities	6.22				17.07	14.65	20.06	4.87
No. of Hours Spent in employment	3.46				26.56*	9.88	30.61*	19.80

^aPearson Product Moment Correlation. All other analyses are based on Chi-square analyses.*
p < .05

academic dishonesty are relatively prevalent on campus. Seventy-nine percent of the students acknowledged some participation in at least one dishonesty behavior. The respondents reported having observed others participating in dishonesty more frequently than they personally participated. In addition, they reported having seen other students participate in forms of dishonesty which were considered to be somewhat more serious.

The findings support two of the three research hypotheses. There is a slight relationship between a student's stage of moral development and the degree of seriousness with which they view academic dishonesty and there is a relationship between the degree of seriousness with which students view academic dishonesty and their participation in academic dishonesty. The data, however, failed to demonstrate a relationship between stage of moral development and participation in academic dishonesty. The evidence presented on the ancillary issues indicated that relationships exist between several of the demographic variables and the variables relevant to academic dishonesty.

The implications of these results are discussed in the following chapter.

Chapter Five

Major Findings, Conclusions, Implications, and Recommendations

This study was designed to increase our understandings about the extent and scope of academic dishonesty and about the moral development of undergraduates. This chapter discusses the major findings and conclusions; outlines the limitations of the research design; and discusses recommendations for future practice and research.

Major Findings and Conclusions

The major findings of the study are organized into several categories including the extent and scope of academic dishonesty, moral development and academic dishonesty, moral development and related variables, reporting behaviors, and reasons why college students cheat.

Extent and Scope of Academic Dishonesty

The results of this study were consistent with other studies which document the incidence of academic dishonesty on campuses (Applebaum, 1980; Bowers, 1964; Chapin, Dalton, and Ebbers, 1980). The finding that 79% of the subjects participated at least once in some form of dishonesty confirms that incidents of cheating are prevalent and that the concerns expressed by the Carnegie Council are not unwarranted.

The study's findings also indicated that students differentiated between types of dishonesty. Cheating associated with examinations is considered more serious than cheating on homework assignments or term papers and the more active forms of cheating, such as arranging to give or receive signals and arranging to sit next to someone who will let you copy are considered to be more serious than the passive forms, such as copying from someone's exam without their knowledge or allowing another to copy

during an exam.

Students also reported having observed other students participating in dishonesty more frequently than they acknowledged their own personal participation, and they reported having observed other students participating in the more serious forms of dishonesty.

Moral Development and Academic Dishonesty

The results failed to demonstrate a relationship between moral development and personal participation in academic dishonesty. This outcome is not entirely surprising or unexpected. Research reviewed in Chapter Two concludes that moral development is not synonymous with moral action. Rest (1979) expressed the view "that moral judgment is an important factor in real life decision making, but that the interaction with other factors complicates the relationship so that simple linear correlations cannot be expected". He goes on to conclude that "Moral judgment scores tell us something about the general interpretative frameworks that a person brings to a moral problem, and presumably the way a person interprets a problem has a bearing on his decision making." (p. 260).

Rest (1979) speculated about the factors or processes which might act as a mediating variable between moral judgment and behavior and identified several conditions under which the correlation between moral judgment and behavior should be higher. They were: 1) if a subject detects a moral dilemma in the situation; 2) if all subjects have the same facts and figures about the situation; 3) if the behavior in question does not occur in a high pressure situation; 4) if the information on moral judgments reflects well-thought-out positions rather than "off the top of the head" ideas; 5) if the information on moral judgment is not a deliberate misrepresentation; 6) if all the subjects are high on ego-strength; and 7) if moral values are predominant over other values for the subject (Rest,

1979, p. 179). Several of these conditions may have contributed to this study's failure to demonstrate a statistically significant relationship between moral development and personal participation in academic dishonesty. Specifically, students may not have considered the cheating situation as a moral dilemma; or the academic environment may have presented a high-pressure situation which interfered with the subjects moral judgment; or students may not be particularly high on ego-strength; or finally, other values may have been predominant over the students' moral values.

Another factor which may have contributed to the study's failure to demonstrate a relationship between moral development and behavior was the fact that students reported rather infrequent personal participation. It is interesting to note that there was a slight inverse relationship between moral development and observed participation ($r = -.15$ $p < .05$). While the relationship with observed participation is clearly not conclusive, it serves as evidence to support continued exploration into the relationship between moral development and participation in academic dishonesty.

A relatively strong relationship was demonstrated between students' attitude about the seriousness of dishonesty and their personal participation ($r = -.47$ $p < .05$). The results also indicated a slight relationship between stage of moral development and attitude about the seriousness of academic dishonesty ($r = .22$ $p < .05$). Students who were more mature in their moral development tended to consider forms of dishonesty as more serious than did students who were less mature; and students who considered dishonesty to be more serious also participated less frequently in academic dishonesty. It may be useful to consider a student's attitude about the seriousness of academic dishonesty as one of the mediating factors which interact with stage of moral development to influence behavior.

Moral Development and Significant Demographic Variables

The results of this study demonstrated statistically significant relationships between moral development and three of the demographic variables, age, place of residence, and academic division.

Older students tended to be more mature in their moral reasoning and considered dishonesty to be more serious than did younger students. Older students also reported less personal participation in dishonesty. Students living off campus were more mature in their moral development than were students living on campus. Students enrolled in the behavioral and social sciences were more mature in their moral development than students enrolled in other divisions. In addition, undecided students were less mature than were students who had selected a field of study.

Reporting Behaviors

The students in this study were primarily conventional thinkers in their assessment of moral dilemmas. Their thinking is characterized as the "law and order" orientation. Correct behavior consists of doing one's duty, showing respect for authority, and maintaining the social order for its own sake. Why would the majority of this group choose not to report incidents of dishonesty to the appropriate authorities? Students at the conventional level of thinking may be willing to ignore incidents because they assume that the person responsible for upholding the "law and order" is the authority figure. Therefore, it is the instructors "job" to enforce the rules. Principled thinkers might be more likely to see themselves as having a commitment and involvement in the preservation of academic dishonesty and might be more willing to report or sanction offenders.

A significant relationship was found to exist between what action college students would take when they observe incidents of dishonesty and

three of the demographic variables; sex, place of residence, and the amount of time spent in employment. Women were more likely to report students for cheating in both the honor code and the non-honor code situation, particularly if they considered the behavior to be at least somewhat serious.

Students living off campus and students who worked more than 15 hours per week were more likely to ignore incidents of cheating than were students living on campus or who were working less than 5 hours per week. One might speculate that reporting behaviors are influenced by level of involvement, commitment, or identification with the academic community.

Reasons Why Students Cheat

Forty-eight percent of the students indicated that the reason they would personally cheat was to avoid failure. The avoidance of failure is the expected response for preconventional thinkers rather than conventional thinkers. Preconventional thinkers would choose to follow the rules when it is in their own immediate best interest.

Conclusions

Based on these findings there are several conclusions which should be considered when planning future programs or research in this area.

The fact that students reported having seen others participate in academic dishonesty more frequently than they acknowledged their own personal participation may indicate that estimates of personal participation should be considered as conservative estimates of the actual amount of cheating on campus.

The extent of personal participation in academic dishonesty is influenced to a greater degree by a student's attitude about the seriousness of dishonesty than by their stage of moral development.

Cheating is not always perceived as a moral issue. Students cheat to avoid

failure. College students are also willing to tolerate cheating behaviors among their peers by ignoring incidents of dishonesty.

Older students and students living off campus were more mature in their moral development. The older students also considered academic dishonesty to be more serious and reported less personal and observed participation than did the younger students.

Implications

Today's college students appear to value achievement and the ability to compete successfully considerably more than they value academic integrity. Levine (1980) summarizes the results of various Carnegie Council reports and indicates that there has been a modest increase in the proportion of students nationwide who say they have to cheat to get the grades they want (p. 66). The extreme competition for career placement and admission to graduate and professional school is considered to be a significant factor affecting the incidents of dishonesty on campus (Carnegie Council, 1979; Levine, 1980). The reasons cited for cheating in this study also provide evidence that the relative value of academic integrity may be obscured by the increased emphasis on achievement and competition. If students do not recognize a cheating situation as a moral dilemma but rather see it as an achievement dilemma a completely different and inappropriate behavioral response may result.

The picture of academic life portrayed by these data is not a particularly encouraging one. Academic dishonesty is prevalent and students are willing to tolerate it. The academic community has not succeeded in communicating to students the inherent value of academic integrity and this reality must be confronted. The situation, admittedly, is not a new one. Cheating has been an issue for higher education for at least

the past 50 years. The issue of competition is not new either. In 1941, Drake concluded that the crux of the academic dishonesty problem stemmed from competition for grades. The continued persistence of the problem may be attributable to several factors. Cheating may be a cyclical problem whose prominence coincides with the societal cycle Levine (1980) described as individual ascendancy; or it may be that earlier approaches to the problem are no longer effective in today's social milieu. The situation presents a substantial challenge to higher education as it considers what steps must be taken to preserve and enhance academic integrity. The fundamental assumptions of cognitive-developmental theory should be carefully considered and incorporated into the design of proposed solutions. These assumptions include:

1. College students are at different places developmentally and should not be considered as a homogeneous group.
2. Moral development is facilitated by opportunities to role play, confront different social or moral perspectives, and participate in decision making on ethical issues.
3. College students can comprehend all stages up to and including their own stage, but they cannot comprehend stages of moral reasoning more than one stage above their own.
4. The environment should provide the necessary challenges and stimulation to encourage new responses and developmental growth.
5. The moral development of some students may exceed that of some faculty and staff members.

Before discussing some specific suggestions for future practice and research the limitations of the study's research design will be discussed.

Limitations of the Study

This study is representative of the descriptive survey research approach described by Good (1972) and contains certain limitations associated with this type of investigation (p. 213). Some specific limitations identified with the research design in this study are discussed below.

Sample Size

Five hundred students were invited to participate in the study, but only 146 agreed to participate. In addition, the data analysis was performed on a smaller group because 19% of the DIT scores had to be discarded because of their lack of consistent responses. Generalizations and conclusions based on a sample of this size should be considered cautiously.

Schedule for Data Collection

As discussed in previous sections, moral development proceeds along a continuum, subject to change under the appropriate environmental conditions and stimulation. In order to minimize the impact of time on the collection of developmental data, all data was collected within a four week time frame. This schedule placed logistical constraints on the amount of follow up activity with subjects and may have contributed to limiting the number of respondents who were able to participate.

In addition, because the data was collected relatively early in the fall semester, freshmen and other new students may not have had a sufficient amount of experience in academic exercises such as examinations and term papers. This lack of experience may have affected their responses.

Unanticipated Publicity

The research proposal for this study was approved in April, 1980. Shortly afterwards incidents of academic dishonesty on campus received widespread attention and publicity. Articles and editorials appeared in the campus and local news media as well as in The Wall Street Journal

and Newsweek. This unexpected media coverage and attention may have affected students' willingness to participate and to accurately report the frequency of their participation in forms of dishonesty.

Data Collection Procedure

The data for this study were collected in 19 different administration sessions. In spite of a careful and deliberate effort to ensure that all administration sessions were conducted in exactly the same manner, the subjects were not all administered the instruments simultaneously and four different proctors were hired to conduct the sessions in two different campus locations. It is possible that the differences in surroundings or proctors may have influenced the results. Future research efforts should attempt to improve the data collection procedure. This would include minimally having all administration sessions proctored by the same person and by using the same location for all data collection activities.

Recommendations for Future Practice and Research

The Carnegie Council and others have recommended specific steps institutions should take to enhance the academic integrity on campus (Carnegie Council, 1979; Levine, 1980; and Pavela, 1981). The recommendations include: develop a code of rights and responsibilities with clear definitions of academic dishonesty; publish statements of the full range of penalties that will be imposed for violations of the code and firmly administer the penalties; develop equitable and widely publicized procedures for resolving alleged cases of academic dishonesty; and identify and correct academic procedures and settings which facilitate academic dishonesty. The effectiveness of these measures will be improved if they are planned within the context of the fundamental assumptions of cognitive-developmental theory which were outlined earlier. For example, in addition to publish-

ing the code of academic integrity and the range of penalties, opportunities for discussion among students and faculty must be provided. Development is facilitated by opportunities to role play and confront different social and moral perspectives. Consideration should be given to incorporating a discussion of academic integrity into student orientation programs. New students routinely receive information about grading policies, retention rules, general university requirements, and degree requirements. A discussion of academic integrity would also be appropriate at this time. In addition, faculty members should be encouraged to incorporate a discussion of the institution's policy into the initial class session each semester. Steps such as these enable students to raise questions, ask for examples of plagiarism and fabrication, and seek advice about how to avoid unintentional infractions. Students are exposed to different perspectives and ways of conceptualizing the information which appears printed in official university publications. This approach also enables the institution to communicate the value it places on integrity relative to achievement, competition, and other values.

The importance of the penalties should not be overlooked. A discussion of the penalties will be instrumental in challenging the thinking of students who are operating at the preconventional stages. The practice of simply giving a student a failing grade should be avoided for several significant reasons. The practice does not serve as a deterrent to students who are already in jeopardy of failing and it misleads other schools to which the student may apply (Pavela, 1981). More importantly, it deprives the student of an adequate opportunity to confront the ethical implications of the behavior. The imposition of strict penalties is not antithetical to student development. Appropriately applied sanctions represent the essence of challenge and support.

Another example is the development of equitable procedures for resolving cases of alleged academic dishonesty. The procedures should be compatible with the needs of the academic community and should ensure due process for all parties. The procedure should also be designed to provide the student with an opportunity to confront different perspectives, gain a better understanding of the roles within the academic community, and gain exposure to forms of moral reasoning which they can comprehend and which will be likely to stimulate their development.

In order to facilitate the moral development of students the actions of the academic community must be consistent with its published statements and policies. Failure to identify and correct academic procedures and settings which facilitate academic dishonesty and failure to insist that faculty members demonstrate high ethical standards communicates a mixed message to students and creates an environment which is not conducive to the stimulation and encouragement of development.

The successful implementation of these policies and procedures will require demonstrated commitment to the standards of academic integrity from all members of the academic community. Effective faculty development programs will be needed to inform faculty about the policies and procedures, to discuss developmental theory, and to assist them in developing an effective presentation for use in their classes.

The implementation of these suggestions should result in fewer incidents of academic dishonesty, facilitate the moral development of students, and should improve the ethical community to higher education.

Future Research

The results of this study suggest several other areas or questions which should be considered as topics for future research. These areas include:

1. The most recent research on the Defining Issues Test has resulted in the development of a new scoring index, the D-score. This index is expected to replace the P-score as the overall index of moral development. Further analysis of the data in this study should use the D-score to determine its effectiveness in this type of research.

2. How do students with consistent responses on the DIT differ from those with inconsistent responses, i.e., those whose protocols were discarded from this analysis? By sex? By age? By their responses to the Survey of Academic Dishonesty?

3. How do the attitudes of faculty and administrators compare with student attitudes about the seriousness of academic dishonesty?

4. How do student responses to the Survey of Academic Dishonesty differ by type of institution? Are there differences between public and private schools? Coed vs single sex? Small institutions vs large schools? Community colleges vs 4 year schools? Institutions with an honor code vs those without an honor code?

5. Do students who have been found guilty of academic dishonesty differ in their responses to the DIT and the Survey of Academic Dishonesty from students who have not been charged?

6. Several of the ancillary issues discussed in this study were found to be statistically significant. Future research should explore these relationships in greater detail. For example, why is there a relationship between stage of moral development and place of residence? Why are sex, place of residence, and number of hours spent in employment related to reporting behaviors? Why is there is a relationship between the amount of time spent in employment and the reasons why students cheat?

7. Assuming institutions implement the practices suggested earlier, how effective are these measures?

Conclusion

Cheating on campuses is not a new phenomenon. Incidents have been reported in the literature for the past fifty years. The circumstances surrounding today's discussions differ in two ways from earlier discussions. First, the Carnegie Council, recognizing the magnitude of the problem, assigned specific responsibilities to all parts of the academic community including faculty, students and institutions in an attempt to systematically address the problem. Second, a body of knowledge about student development theory exists today which provides higher education with a conceptual framework within which to consider institutional practices. The framework allows us to analyze and assess both students and the environment so that the theory can be translated into effective measures. There is no longer any legitimate reason for the academic community to fail to address the problem of academic dishonesty.

APPENDICES

Defining Issues Test
(Copyright James Rest, 1972, all rights reserved)

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. The answer sheets will be fed to a computer to find the average for the whole group, and no one will see your individual answers.

In the questionnaire you will be asked to give your opinions about six stories.

* * * * *

Your responses should be recorded on the Optical Scan form you received. Please darken the appropriate circles completely. Do not write your answers on the questionnaire; all responses should be marked on the answer sheet. Please complete all six stories. Before you begin, review the sample story. If you have any questions, please ask the proctor for assistance.

A sample story follows.

Fred Jones has been thinking about buying a car. He is married, has two small children, and earns an average income. The car he buys will be his family's only car. It will be used mostly to go to work and drive around town, but sometime for vacation trips also. In trying to decide what car to buy, Fred Jones realized that there were a lot of questions to consider.

1. Should Fred buy the car?

- A. Should buy it.
- B. Can't decide.
- C. Should not buy it.

If you were Fred Jones, how important would each of these questions be in deciding what car to buy?

G = Great Importance
 M = Much Importance
 S = Some Importance
 L = Little Importance
 N = No Importance

2. Whether the car dealer was in the same block where Fred lives.
3. Would a used car be more economical in the long run than a new car.
4. Whether the color was green, Fred's favorite color.
5. Whether the cubic inch displacement was at least 200.
6. Would a large, roomy, car be better than a compact car?
7. Whether the front connibilies were differential.

From the list of questions above, select the most important one of the whole group. Darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
 Second Most Important
 Third Most Important
 Fourth Most Important
 Less Important

DILEMMA

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
	●	G	●	G	G	●	G
B		M	M	M	M	M	M
C		S	S	●	S	S	S
		L	L	L	●	L	L
		●	N	N	N	N	●
Most Important		O	●	O	O	O	O
2nd Most Important		O	O	O	O	●	O
3rd Most Important		O	O	●	O	O	O
4th Most Important		O	O	O	●	O	O
Less Important		●	O	O	O	O	O

If you have any questions about how to complete the Optical Scan form, please ask the proctor for assistance.

Dilemma A

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

1. Should Heinz steal the drug? (Darken the appropriate circle on the answer sheet under question 1, dilemma A.)
- A. Should steal it
 - B. Can't decide
 - C. Should not steal it

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

G = Great Importance
 M = Much Importance
 S = Some Importance
 L = Little Importance
 N = No Importance

- 2. Whether a community's laws are going to be upheld.
- 3. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
- 4. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
- 5. Whether Heinz is a professional wrestler; or has considerable influence with professional wrestlers.
- 6. Whether Heinz is stealing for himself or doing this solely to help someone else.
- 7. Whether the druggist's rights to his invention have to be respected.
- 8. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
- 9. What values are going to be the basis for governing how people act towards each other.
- 10. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
- 11. Whether the law in this case is getting in the way of the most basic claim of any member of society.
- 12. Whether the druggist deserves to be robbed for being so greedy and cruel.
- 13. Would stealing in such a case bring about more total good for the whole society or not.

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
 Second Most Important
 Third Most Important
 Fourth Most Important
 Less Important

Dilemma B

STUDENT TAKE-OVER

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS students are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get any army training as part of their regular course work and not get credit for it towards their degrees.

Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands.

So, one day last April, two hundred SDS students walked into the University's administration building, and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course.

1. Should the students have taken over the administration building? Darken the appropriate circle on the answer sheet under question 1, dilemma B.
- A. Yes, they should take it over.
 - B. Can't decide.
 - C. No, they should not take it over.

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

G = Great Importance
 M = Much Importance
 S = Some Importance
 L = Little Importance
 N = No Importance

2. Are the students doing this to really help other people or are they doing it just for kicks.
3. Do the students have any right to take over property that doesn't belong to them.
4. Do the students realize that they might be arrested and fined, and even expelled from school.
5. Would taking over the building in the long run benefit more people to a greater extent.
6. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
7. Will the takeover anger the public and give all students a bad name.
8. Is taking over a building consistent with principles of justice.
9. Would allowing one student take-over encourage many other student take-overs.
10. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.
11. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
12. Are the students following principles which they believe are above the law.
13. Whether or not university decisions ought to be respected by students.

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
 Second Most Important
 Third Most Important
 Fourth Most Important
 Less Important

Dilemma C

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

1. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? Darken the appropriate circle on the answer sheet under question 1, dilemma C.
 - A. Should report him.
 - B. Can't decide.
 - C. Should not report him.

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

G = Great Importance
 M = Much Importance
 S = Some Importance
 L = Little Importance
 N = No Importance

2. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
3. Everytime someone escapes punishment for a crime doesn't that just encourage more crime?
4. Wouldn't we be better off without prisons and the oppression of our legal system?
5. Has Mr. Thompson really paid his debt to society?
6. Would society be failing what Mr. Thompson should fairly expect?
7. What benefits would prisons be apart from society, especially for a charitable man?
8. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
9. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
10. Was Mrs. Jones a good friend of Mr. Thompson?
11. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
12. How would the will of the people and the public good best be served?
13. Would going to prison do any good for Mr. Thompson or protect anybody?

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
 Second Most Important
 Third Most Important
 Fourth Most Important
 Less Important

Dilemma D

THE DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer, like morphine, would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway.

1. What should the doctor do? Darken the appropriate circle on the answer sheet under question 1, dilemma D.

- A. Should give the lady an overdose that will make her die.
- B. Can't decide.
- C. Should not give the overdose.

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

- G = Great Importance
- M = Much Importance
- S = Some Importance
- L = Little Importance
- N = No Importance

- 2. Whether the woman's family is in favor of giving her the overdose or not.
- 3. Is the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her.
- 4. Whether people would be much better off without society regimenting their lives and even their death.
- 5. Whether the doctor could make it appear like an accident.
- 6. Does the state have the right to force continued existence on those who don't want to live.
- 7. What is the value of death prior to society's perspective on personal values.
- 8. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
- 9. Is helping to end another's life ever a responsible act of cooperation.
- 10. Whether only God should decide when a person's life should end.
- 11. What values the doctor has set for himself in his own personal code of behavior.
- 12. Can society afford to let everybody end their lives when they want to.
- 13. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

- Most Important
- Second Most Important
- Third Most Important
- Fourth Most Important
- Less Important

Dilemma E

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against orientals, he was afraid to hire Mr. Lee because many of his customers didn't like orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee.

1. What should Mr. Webster have done? Darken the appropriate circle on the answer sheet under question 1, dilemma E.
 - A. Should have hired Mr. Lee.
 - B. Can't decide.
 - C. Should not have hired him.

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

G = Great Importance
 M = Much Importance
 S = Some Importance
 L = Little Importance
 N = No Importance

2. Does the owner of a business have the right to make his own business decisions or not?
3. Whether there is a law that forbids racial discrimination in hiring for jobs.
4. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
5. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
6. What individual differences ought to be relevant in deciding how society's roles are filled?
7. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
8. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
9. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
10. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
11. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
12. Whether the Christian commandment to love your fellow man applies to this case.
13. If someone's in need, shouldn't he be helped regardless of what you get back from him?

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
 Second Most Important
 Third Most Important
 Fourth Most Important
 Less Important

Dilemma F

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed paper for students so that he could express many of his opinions. He wanted to speak out against the war in Viet Nam and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred was starting his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

1. Should the principal stop the newspaper? Darken the appropriate circle on the answer sheet under question 1, dilemma F.

A. Should stop it.
B. Can't decide.
C. Should not stop it.

On the answer sheet darken the appropriate circle (G, M, S, L, or N) under items 2 through 13 to indicate how important each of these questions would be in deciding what to do.

G = Great Importance
M = Much Importance
S = Some Importance
L = Little Importance
N = No Importance

2. Is the principal more responsible to students or to parents?
3. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
4. Would the students start protesting even more if the principal stopped the newspaper?
5. When the welfare of the school is threatened, does the principal have the right to give orders to students?
6. Does the principal have the freedom of speech to say "no" in this case?
7. If the principal stopped the newspaper would he be preventing full discussion of important problems?
8. Whether the principal's order would make Fred lose faith in the principal.
9. Whether Fred was really loyal to his school and patriotic to his country.
10. What effect would stopping the paper have on the students' education in critical thinking and judgment?
11. Whether Fred was in any way violating the rights of others in publishing his own opinions.
12. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
13. Whether Fred was using the newspaper to stir up hatred and discontent.

From the list of questions above, select the most important one of the whole group and darken the circle under most important. Do likewise for your 2nd, 3rd, 4th, and less important choices.

Most Important
Second Most Important
Third Most Important
Fourth Most Important
Less Important

SURVEY OF ACADEMIC DISHONESTY

Section I:

Please complete each item. Select the most appropriate response and write the number of the answer on the line next to each item.

- _____ 1. AGE: Please list age as of last birthday.
- _____ 2. SEX: 1. Male
2. Female
- _____ 3. PLACE OF RESIDENCE:
1. Dormitory
2. Fraternity/Sorority House
3. Own Apartment/House
4. Live with Parents
5. Other
- _____ 4. ACADEMIC DIVISION:
1. Agricultural and Life Sciences
2. Arts and Humanities
3. Behavioral and Social Sciences
4. Human and Community Resources
5. Mathematical and Physical Sciences and Engineering
6. Undergraduate Studies
7. Undecided
- _____ 5. CLASS STANDING:
1. Freshman (completed less than 27 semester hours)
2. Sophomore (completed 28-55 semester hours)
3. Junior (completed 56-85 semester hours)
4. Senior (completed 86 to at least 120 semester hours)
5. Other
- _____ 6. Number of hours per week spent in organized extracurricular activities: (for example, Student Government, Judicial Board, fraternity, clubs, intercollegiate athletics, intramurals, etc.)
1. 0 - 3 hours
2. 4 - 7 hours
3. 8 - 11 hours
4. 12 - 15 hours
5. more than 15 hours
- _____ 7. Number of hours per week spent at employment:
1. 0 - 4 hours
2. 5 - 10 hours
3. 11 - 15 hours
4. More than 15 hours but less than full time
5. Full time

-2-

Section II:

Using the following scale, indicate how serious you consider the following activities to be by marking the appropriate response on the line next to each.

1	2	3	4	5
Not Serious at all	Somewhat serious	Moderately serious	Extremely serious	Undecided

- _____ 8. "Padding" a few items on a bibliography.
- _____ 9. Copying a few sentences without footnoting in a paper.
- _____ 10. Copying answers from a source without doing work independently.
- _____ 11. Writing a paper for another student.
- _____ 12. Paying someone to write a paper to submit as your own work.
- _____ 13. Getting questions or answers from someone who has already taken the same exam.
- _____ 14. Arranging with other students to give or receive answers by use of signals.
- _____ 15. Copying from someone's exam paper without his knowledge.
- _____ 16. Arranging to sit next to someone who will let you copy from his/her exam.
- _____ 17. Allowing another student to copy from you during an exam.
- _____ 18. Taking an exam for another student.
- _____ 19. Having another student take an exam for you.
- _____ 20. Working on homework with other students when the instructor does not allow it.
- _____ 21. Altering or forging an official University document.

Section III:

Using the following scale, indicate how often you have taken part in the following activities by marking the appropriate response on the line next to each item.

1	2	3	4	5
Never	Rarely (Less than 10% of the time)	Not Often (Less than 25% of the time)	Sometimes (More than 50% of the time)	Frequently (Too often to count)

- _____ 22. "Padding" a few items on a bibliography.
- _____ 23. Copying a few sentences without footnoting in a paper.
- _____ 24. Copying answers from a source without doing work independently.
- _____ 25. Writing a paper for another student.
- _____ 26. Paying someone to write a paper to submit as your own work.
- _____ 27. Getting questions or answers from someone who has already taken the same exam.
- _____ 28. Arranging with other students to give or receive answers by use of signals.
- _____ 29. Copying from someone's exam paper without his/her knowledge.
- _____ 30. Arranging to sit next to someone who will let you copy from his/her exam.
- _____ 31. Allowing another student to copy from you during an exam.
- _____ 32. Taking an exam for another student.
- _____ 33. Having another student take an exam for you.
- _____ 34. Working on homework with other students when the instructor does not allow it.
- _____ 35. Altering or forging an official University document.

Section V:

For items 50 - 54 please select the most appropriate answer and write the number of the answer on the line next to each item.

- _____ 50. How often have your instructors discussed university policies pertaining to academic dishonesty or referred to their own requirements on that subject.
1. Too often to count.
 2. Sometimes (more than 50% of the time)
 3. Not often (less than 25% of the time)
 4. Rarely (less than 10% of the time)
 5. Never
- _____ 51. Suppose you saw a student cheating. What would you do?
1. Report the student(s) to the instructor, proctor, or appropriate authority.
 2. Ask the student(s) to report him/herself/themselves.
 3. Express disapproval but not report the student(s).
 4. Ignore the incident.
 5. If I considered the incident to be at least somewhat serious, I would report the student(s) to the appropriate authority.
- _____ 52. If university regulations required students to report others who cheat, how would you answer the last question?
1. Report the student(s) to the instructor, proctor, or appropriate authority.
 2. Ask the student(s) to report him/herself/themselves.
 3. Express disapproval but not report the student(s).
 4. Ignore the incident.
 5. If I considered the incident to be at least somewhat serious, I would report the student(s) to the appropriate authority.
- _____ 53. In your opinion, the reason students are most likely to cheat is:
1. No one ever gets punished for it.
 2. It is necessary in order to avoid failing the class.
 3. Their friends all do it.
 4. The professors and the tests are so unfair.
 5. There are no possible circumstances where it is acceptable to cheat.
- _____ 54. The reason I would be most likely to cheat is:
1. No one ever gets punished for it.
 2. It is necessary in order to avoid failing the class.
 3. My friends all do it.
 4. The professors and the tests are so unfair.
 5. There are no possible circumstances where it is acceptable to cheat.

UNIVERSITY OF MARYLAND

DIVISION OF HUMAN AND COMMUNITY RESOURCES

COLLEGE OF EDUCATION

COLLEGE PARK, MARYLAND 20742

DEPARTMENT OF EDUCATION POLICY,
PLANNING, AND ADMINISTRATIONCHAIRMAN 301-454-5767
ADMINISTRATION, SUPERVISION
AND CURRICULUM -5766
SOCIAL FOUNDATIONS -4032

September 28, 1980

Dear Student:

You have been selected from a random sample of full time, under-graduates enrolled at the University of Maryland to participate in a research project being conducted as part of my doctoral dissertation for the Department of Education Policy, Planning, and Administration.

The study is designed to collect information about college students' attitudes on a variety of contemporary social issues. Your participation is entirely voluntary and all responses will be collected anonymously. The data will be analyzed by computer and will be reported in summary form; individual responses will not be reported. It will only take approximately 30 minutes of your time to participate.

WAIT! Before you say that you are too busy to spend 30 minutes! Your participation is essential to the success of my study. I recognize that you are busy but hope that you will attend one of the sessions listed below. As a small token of appreciation, all persons who complete the surveys will receive a free movie pass to the Hoff Theater in the Student Union.

The questionnaires will be administered on campus during the next few weeks. Please select a convenient time and report to the location listed below. Remember, it should only take about 30 minutes.

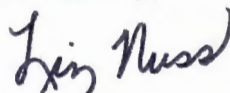
DAY	DATE	TIME	ROOM & BUILDING
Mon.	October 6	10 AM - 1 PM	1102 Student Union
Tues.	October 7	10 AM - 1 PM	2113 North Administration Building
Wed.	October 8	10 AM - 1 PM	2113 North Administration Building
Wed.	October 8	3:30 - 5 PM	1102 Student Union
Thurs.	October 9	10 AM - 1 PM	1102 Student Union
Friday.	October 10	10 AM - 1 PM	2113 North Administration Building

Mon.	October 13	10 AM - 1 PM	1102 Student Union
Tues.	October 14	10 AM - 1 PM	2113 North Administration Building
Wed.	October 15	10 AM - 12:30 PM	2136 Student Union
Wed.	October 15	3:30 - 5 PM	1102 Student Union
Thurs.	October 16	10 AM - 1 PM	1102 Student Union
Fri.	October 17	10 AM - 1 PM	2113 North Administration Building

If you have any questions about the study or are unable to attend one of the above sessions, please call me at 552-3580 in the evening, and I will be glad to arrange a more convenient time.

The successful completion of my study is dependent upon the willingness of students like yourself to help. Thank you in advance for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads "Liz Nuss".

Liz Nuss

LN/s11

cc: Professor Robert Carbone

APPENDIX 4

Schedule of Additional Data Collection Sessions
 Arranged as a Result of Telephone Follow Up

DATE	TIME	LOCATION
Friday, October 17	10 AM - 1 PM	2113 North Administration Building
Monday, October 20	10 AM - 1:30 PM	1102 Student Union
Tuesday, October 21	10 AM - 1:30 PM	1102 Student Union
Thursday, October 23	2:30 - 4:30 PM	2113 North Administration Building
Monday, October 27	10 AM - 1:30 PM	1102 Student Union
Tuesday, October 28	10 AM - 1:30 PM	1104 Student Union
Thursday, October 30	2:30 - 4:00 PM	2113 North Administration Building
Friday, October 31	9 AM - 11:30 AM	2113 North Administration Building

October 1980

Dear Student:

You have been selected from a random group of students enrolled at the University of Maryland, College Park, to participate in a research study. The study is being conducted as part of a doctoral dissertation project for a student enrolled in the Department of Administration, Curriculum & Supervision in the College of Education. The study is intended to collect information about students' attitudes toward a variety of social problems with an emphasis on academic dishonesty. Your participation in this study is completely voluntary. Individual responses will be collected anonymously. The data will be analyzed by the computer and reported in summary form.

A questionnaire packet is being distributed to you. It contains two instruments. One, the Defining Issues Test, is intended to solicit information about your personal opinions about a set of social problems. The second instrument requests that you respond to a series of questions about academic dishonesty. Please consider each question carefully and respond to each item as indicated. It takes approximately 30 minutes to complete the questionnaires.

Please review these instructions carefully. If you have any questions please ask the proctor for assistance. Your participation is sincerely appreciated.

1. All information is submitted anonymously. Do not write your name on any of the questionnaire materials. In order to avoid receiving a follow up telephone call you may submit the slip of paper with your name. This is completely optional.
2. Students should complete the instruments in order. First, the Defining Issues Test and then the Survey of Academic Dishonesty.
3. The responses to the Defining Issues Test should be placed on the Optical Scan Form. Please don't make any marks directly on the DIT since these copies will be used by other students. Responses to the survey should be made directly on the scan sheet.
4. All materials should be returned to the proctor in the envelope. Submit the optional slip of paper separate from the envelope. Because of copyright limitations all materials must be returned to the proctor.
5. When you return the envelope to the proctor you will receive a free movie pass to the Hoff Theater.

Thank You,

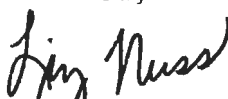

Liz Nuss

Table 20
Sample Distribution by Age

N = 146

	<u>N</u>	<u>Relative Frequency %</u>	<u>Absolute Frequency %</u>
17 yrs. old	6	4.1	4.1
18	19	13.0	13.1
19	28	19.2	19.3
20	33	22.6	22.8
21	21	14.4	14.5
22	11	7.5	7.6
23	9	6.2	6.2
24	2	1.4	1.4
25	3	2.1	2.1
27	1	.7	.7
28	3	2.1	2.1
30	2	1.4	1.4
31	1	.7	.7
32	1	.7	.7
33	1	.7	.7
34	1	.7	.7
40	1	.7	.7
41	1	.7	.7
42	1	.7	.7
Missing	1	.7	missing
Total	146	100.0	100.0

Table 21

Sample Distribution by Sex

N = 146

	<u>N</u>	<u>Relative Frequency %</u>	<u>Adjusted Frequency %</u>
Male	71	48.6	49.3
Female	73	50.0	50.7
Missing	<u>2</u>	<u>1.4</u>	<u>missing</u>
Total	146	100.0	100.0

Table 22

Sample Distribution by Residence

N = 146

	<u>N</u>	<u>Relative Frequency %</u>	<u>Adjusted Frequency %</u>
Dormitory	49	33.6	33.8
Fraternity/Sorority House	4	2.7	2.8
Own Apartment/House	37	25.3	25.5
Live with Parents	52	35.6	39.9
Other	3	2.1	2.1
Missing	1	.7	missing
Total	146	100.0	100.0

Table 23

Sample Distribution by Academic Division

N = 146

	<u>N</u>	<u>Relative Frequency %</u>	<u>Adjusted Frequency %</u>
Agricultural & Life Sciences	18	12.3	12.4
Arts & Humanities	24	16.4	16.6
Behavioral & Social Sciences	39	26.7	26.9
Human & Community Resources	11	7.5	7.6
Mathematical, Physical Sciences & Engineering	41	28.1	28.3
Undergraduate Studies	4	2.7	2.8
Undecided	8	5.5	5.5
Missing	1	.7	missing
Total	146	100.0	100.0

Table 24

Sample Distribution by Class Standing

N = 146

	<u>N</u>	<u>Relative Frequency %</u>	<u>Adjusted Frequency %</u>
Freshman	25	17.1	17.2
Sophomore	36	24.7	24.8
Junior	45	30.8	31.0
Senior	37	25.3	25.5
Other	2	1.4	1.4
Missing	1	.7	missing
Total	146	100.0	100.0

Table 25

Sample Distribution by Number of Hours Spent
in Extracurricular Activities Per Week

N = 146			
	<u>N</u>	<u>Relative Frequency %</u>	<u>Absolute Frequency %</u>
0 - 3 hours	99	67.8	68.3
4 - 7 hours	31	21.2	21.4
8 - 11 hours	9	6.2	6.2
12 - 15 hours	4	2.7	2.8
more than 15 hours	2	1.4	1.4
missing	1	.7	missing
Total	146	100.0	100.0

Table 26

Sample Distribution by Number of Hours Spent at
Employment Per Week

N = 146			
	<u>N</u>	<u>Relative Frequency %</u>	<u>Absolute Frequency %</u>
0 - 4 hours	64	43.8	44.1
5 - 10 hours	17	11.6	11.7
11 - 15 hours	18	12.3	12.4
more than 15 hours but less than full time	38	26.0	26.2
full time	8	5.5	5.5
missing	1	.7	missing
Total	146	100.0	100.0

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